CURRICULUM VITAE

1. **NAME** HIMADRI SEKHAR DAS.

Sex : Male. **Marital Status** Married. :

2. Permanent Address Dr. Himadri Sekhar Das.

S/O - Late Himangshu Sekhar Das.

Brajendra Road.

P.O. & Dt. - Karimganj 788710.

State - Assam (India).

3. Address for Dr. Himadri Sekhar Das Correspondence

Department of Physics.

Assam University. Silchar 788011.

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himsekhar13@yahoo.co.in

hsdas13@gmail.com

Telephone 03842-222009 (Residence)

4. Educational Qualifications:

Degree	Institution /	Year
	University	
H. S. L. C.	S. E. B. A. ¹	1992
Higher Secondary	A. H. S. E. C. ²	1994
B. Sc.	Assam University	1997
M. Sc. (Physics)	Assam University	1999
Ph. D. (Astrophysics)	Assam University	2005

1 S. E. B. A. : Board of Secondary Education, Assam

2 A. H. S. E. C. : Assam Higher Secondary Education Council, Guwahati

5. Postdoctoral Fellowship:

Postdoctoral research was conducted at the University of Maryland, College Park, Maryland, USA in 2013.

6. Present Employment:

Working as an **Associate Professor** in the Department of Physics, Assam University, Silchar

7. Date of joining to Assam University, Silchar:

October 03, 2007.

8. Award/Fellowship/Achievement:

• Rotary Award-2018:

Honored by Rotary Club of Hailakandi for the service in the field of Astronomy & Astrophysics on July 01, 2018.

• Inspired Teachers' In-Residence Programme at Rashtrapati Bhavan (2015):

Honored by Hon'ble President of India **Shri Pranab Mukherjee** in the *Inspired Teachers' In-Residence Programme at Rashtrapati Bhavan* held during **6th June** to **12th June**, **2015**. *Inspired Teacher* (alternatively termed President's Inspired Teacher) is the highest civilian recognition for University-level teachers in the Republic of India in the form of an In-Residence Programme with the President of India at Rashtrapati Bhavan, New Delhi.

• Paragon Excellence Award-2015:

Honored by *Paragon*, an NGO in Badarpur (Assam), with **Paragon Excellence Award-2015** on **January 30**, **2016** for the service rendered in the field of Education and Nation building.

• Indo-US Research Fellowship (2013):

Awarded Indo-US Research Fellowship for the year 2013 for conducting advanced research in the area of Physical Sciences (Astrophysics) for the duration of 3 months (September 15 – December 15, 2013) with Prof. Ludmilla Kolokolova at University of Maryland, USA. The fellowship was supported by the Indo-US Science and Technology Forum (IUSSTF) in association with Science and Engineering Research Council (SERC) of Department of Science and Technology (DST), Govt. Of India.

• DAE Fellowship (2000 - 2004):

Worked as Research Fellow (RF) in the Dept of Physics, Assam University, Silchar under the guidance of **Dr. Asoke Kr. Sen** since March 29, 2000 for PhD, in a project (BRNS/98/37/6) titled *Photopolarimetric studies of comets* funded by the Department of Atomic Energy (Govt. of India) in collaboration with Bhabha Atomic Research Centre (BARC), Mumbai.

• Saktipada Das Memorial Award (1992):

Awardee of Saktipada Das Memorial Award for the year 1992 for securing the topmost position in the H. S. L. C. Examination 1992 among the successful candidates of Nilmani H. S. School, Karimganj, Assam.

• Sushama Paul Memorial Award (1992):

Awardee of Sushama Paul Memorial Award for the year 1992 for securing the topmost position in the H. S. L. C. Examination 1992 among the successful candidates of Nilmani H. S. School, Karimganj, Assam.

- 9. Ph. D. Thesis Title: Photopolarimetric studies of comets and other objects.
- 10. **Publications:** (List Enclosed: ANNEXURE-1)

11. Project completed:

A project entitled "Study of light scattering properties of cosmic dust using cluster computation" (SR/FTP/PS-092/2011) funded by the Department of Science & Technology (DST), Govt. of India under FAST Track scheme during 2012-2016. The total cost of the project was Rs. 17,40,000/-.

12. Associateship:

Associate of Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune since August 01, 2007.

13. Experience of guiding M. Phil./ Ph. D.:

• Number of scholars awarded:

- (a) Total number of scholars awarded M. Phil. so far: 05
- (b) Total number of scholars awarded Ph. D. so far: 10

• Details about M. Phil. awarded under my supervision:

- (v) Ms. Saonli Datta Majumder (2009): Aggregate dust model to describe the polarization properties of comet.
- (iv) Mr. Abinash Suklabaidya (2008): Modelling of the light scattering by cometary dust using fractal aggregates.
- (iii) Ms. Tapasree Paul (2008): Study of light scattering by aggregate particles in comet Levy 1990XX.
- (ii) Mr. Dipankar Paul (2009): To study the dust grain characteristics of comet by comparing the theoretical polarization values with the observed polarization values for comet (Registered to Periyar University, Salem through distant mode).
- (i) Mr. Sujit Ranjan Das (2008): Polarimetric studies of comet Halley using T-matrix theory (Registered to Madurai Kamaraj University, Madurai through distant mode).

• Details about Ph. D. awarded under my supervision:

- (x) **Prithish Halder** (awarded on 01-05-2019) (PhD/2380/13 dtd. 11.09.2013): Study of Physical Properties of Cosmic Dust from Light Scattering.
- (ix) **Jaydeep Paul** (awarded on 10-10-2018) (PhD/2276/13 dtd. 03.04.2013): A Theoretical Study of Double Layers and Sheaths in Various Plasma Configurations.
- (viii) **Ajoy Barman** (awarded on 13-08-2018) (PhD/2031/12 dtd. 12.09.2012): Photometric and Polarimetric Studies of Some Selected Dark Clouds.
- (vii) **Arup Das** (awarded on 07-08-2018) (PhD/2384/13 dtd. 11.09.2013): *Photopolarimetric Study of some Selected Dark Clouds.*
- (vi) Parizath Deb Roy (awarded on 26-07-2017) (PhD/1787/11 dtd. 22.09.2011): A comprehensive dust model to describe the polarization properties of comet.
- (v) **Arindwam Chakraborty** (awarded on 26-07-2017) (PhD/1788/11 dtd. 22.09.2011): Study of optical properties of cosmic dust by numerical simulations and observations.
- (iv) **Abinash Suklabaidya** (awarded on 07-08-2013) (PhD/1114/10 dtd. 07.04.2010): *Modeling of light scattering properties of cometary dust.*

- (iii) Chinmoy Bhattacharjee (awarded on 16-04-2013) (PhD/ 719/2009/ dtd. 16.04.2013). Study of Light Scattering properties of cosmic dust (as a Cosupervisor).
- (ii) **Dipankar Paul** (awarded on 26-09-2012) (PhD/718/09/ Dtd. 11.02.09). Study of Polarisation properties of comets and other objects (as a Co-supervisor).
- (i) Sujit Ranjan Das (awarded on 16-11-2011) (PhD/650/08 dtd. 17.04.08). Modelling of Optical characteristics of cometary dust by fractal aggregates (as a Cosupervisor).

14. Visit to universities/institutes in abroad for research work:

- (i) Visited the *University of Lille*, **Lille**, **France** to attend and present a paper at the Second international workshop on "Advancement of polarimetric observations: calibration and improved aerosol retrievals" (APOLO-2019) from **November 4 to 7, 2019**.
- (ii) Visited the Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, **Hefei, China** to attend and present a paper at the 1st international workshop on "Advancement of polarimetric observations: calibration and improved aerosol retrievals" (APOLO-2017) from **October 24 to 27, 2017**.
- (iii) Visited the University of Maryland, Maryland, USA to attend the 16th Electromagnetic and Light Scattering Conference (ELS-XVI) and for a collaborative research work with Prof. Ludmilla Kolokolova from March 18 to April 05, 2017.
- (iv) Visited the Israel Institute for Advanced Studies (IIAS), at the Edmond J. Safra Givat Ram Campus, the Hebrew University of Jerusalem, ISRAEL to attend and present a paper in the 33rd Winter School in Theoretical Physics on Exoplanets during December 28, 2015 to January 8, 2016.
- (v) Visited the Umeda Satellite Campus of Osaka Sangyo University, Umeda, Kita-ku, Osaka, JAPAN to attend and present a paper in the 7th meeting on Cosmic Dust during Aug 02 09, 2014.
- (vi) Visited the University of Maryland, Maryland, USA for a collaboration work with Prof. Ludmilla Kolokolova from September 15 to December 15, 2013.
- (vii) Visited **Seapal Suma**, **Kobe**, **JAPAN** to attend and present a paper at the Centre for Planetary Science (CPS) 9th International School of Planetary Science entitled Across the Earth into Exoplanets from **June 24 to June 30, 2012**.
- (viii) Visited Awaji Island, Hyogo, JAPAN for attending JSPS-DST Asia Academic Seminar/ Centre for Planetary Science (CPS) 8th International School of Planetary Science entitled Challenges in Astronomy: Observational Advances from Sept' 25 to October 04, 2011.

15. Experience:

• Refresher Course:

(a) Attended the **Refresher Course in Astronomy and Astrophysics**, conducted by Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune from May 06 to June 07, 2013.

(b) Attended the **Refresher Course in Astronomy and Astrophysics**, conducted by Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune from May 14 to June 15, 2007.

• Orientation Course:

Attended the **15th Orientation Programme**, conducted by North Eastern Hill University (NEHU), Shillong from May 02 to May 29, 2011.

• Faculty Development Programme:

- (a) Attended one week workshop on *Gravitation and Gravitational Waves* from October 7-13, 2018, held at Department of Physics, Assam University, Silchar, organized by Department of Physics, Assam University, Silchar and sponsored by DST-SERB, Govt. of India and IUCAA, Pune.
- (b) Attended two week Faculty Development Programme on **Entrepreneurship Development** during December 19–31, 2016, sponsored by the National Science & Technology Entrepreneurship Development Board (NSTEDB)-Department of Science & Technology (Govt. of India), held at the J. N. School of Management Studies, Assam University, Silchar.

• Previous Teaching Experience:

Institution / University	Duration	Period
Karimganj College	1 year 1 month	July 2004 to January 2005
		July 2005 to December 2005
Kokrajhar Govt. College	1 year 1 month	Aug 2006 to September 2007

• Workshop attended:

Attended the Workshop on Photometer Fabrication held at IUCAA, Pune during December 6-10, 2010.

• Acted as Convener/Coordinator of any Seminar/Conference:

- Acted as a Coordinator to organize an online International Conference on Dust in Astrophysics (ICDA-2020), organized by the Department of Physics, Assam University, Silchar during August 31 to September 01, 2020.
- Acted as a Coordinator to organize a Webinar honouring the apparition of Comet NEOWISE, organized by the Department of Physics, Assam University, Silchar on July 25, 2020.
 organize IUCAA, Pune sponsored Fourth meeting of North-East Meet of As
 - organize IUCAA, Pune sponsored Fourth meeting of North-East Meet of Astronomers (NEMA-IV), held at Assam University, Silchar during November 26 to 28, 2018.
- Acted as a Coordinator to organize IUCAA, Pune sponsored Fourth meeting of North-East Meet of Astronomers (NEMA-IV), held at Assam University, Silchar during November 26 to 28, 2018.
- Acted as a Coordinator to organize Global Initiative of Academic Networks (GIAN), sponsored by Ministry of Human Resource Development (MHRD), Govt. of India which held at Department of Physics, Assam University, Silchar during April 5 to April 13, 2016. The course title of this programme is "Light scattering by different types of particles, with applications in Physics". Prof Robert Botet of Université Paris-Sud, Orsay, France was the key speaker.

Acted as a Coordinator to organize the UGC-SAP sponsored National Seminar on Dusts in Astrophysics (NSDA-2012), held at Dept. of Physics, Assam University, Silchar during Jan 31 to Feb 02, 2012.

• Experience in computer:

Operating Systems : WINDOWS, UNIX (LINUX).

Programming languages : C++, FORTRAN.

Image Processing Software : IRAF, IRIS, APT, fv.

Other Software Packages : Latex, Gnuplot, Super Mongo,

Mathematica etc.

• Experience as a Chair person/Resource Person in the Seminar/Conference etc.:

- Acted as a **Chair Person** in one of the session of the 6th North East Meet of Astronomers (NEMA VI), organized by the Department of Physics, IIT Guwahati, Assam during November 10-13, 2020.
- Acted as a Resource Person at the online lecture series on Recent Advances in Fundamental and Applied Physicsorganized by the Department of Physics, University of Science & Technology, Meghalaya from June 10 to 14, 2020.
- Acted as a Resource Person at the 7 day teaching learning workshop on Astronomy and Astrophysics, sponsored by Ministry of Human Resource Development, Govt. of India, supported by Astronomy Centre for Educators (ACE) of IUCAA, Pune; organized by Department of Physics, Srikishan Sarda College, Hailakandi, Assam from January 22 to 28, 2020.
- Acted as a Chair Person in one of the session of the 5th North East Meet
 of Astronomers (NEMA V), organized by the Department of Physics, Tezpur
 University, and IUCAA, Pune during September 11-13, 2019 at Tezpur University, Tezpur.
- Acted as a Chair Person in three day UGC Sponsored National Seminar on Emerging Areas of Recent Trends in Basic Science Researches, organized by Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam) during September 21 – 23, 2017.
- Delivered a lecture as a Resource Person in DBT sponsored seven day short term training course on "Environmental Studies: An Interdisciplinary Approach", organized by Advanced Level Biotech Hub, S. S. College, Hailakandi on December 18, 2018.
- Acted as a Chair Person in three day UGC Sponsored National Seminar on Emerging Areas of Recent Trends in Basic Science Researches, organized by Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam) during September 21 – 23, 2017.
- Acted as a Chair Person in one of the session of Science & Instrumentation Meeting-III of Thirty Meter Telescope (TMT) project organized by India-TMT and Department of Physics, Tezpur University during December 01–03, 2015, held at Tezpur University, Tezpur, Assam.
- Acted as a Chair Person in a National Seminar on Frontiers of Research in Physical Sciences-2014, sponsored by BRNS, CSIR and ASTEC during September 19–21, 2014, held at Karimganj College, Karimganj, Assam.

- Acted as a Chair Person in Introductory School in Astronomy & Astrophysics-2013, sponsored by Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune during Januray 29–31, 2013, held at Srikishan Sarada College, Hailakandi, Assam.
- Acted as a Chair Person in three day UGC Sponsored National Seminar on Emerging Areas of Research & Development in Chemical and Physical Sciences in North East India, organized by Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam) during October 16 – 18, 2012.

• Experience as a Judge in a Seminar/Project presentation/Quiz competition etc.:

- Acted as a Judge in Science Exhibition at the Don Bosco School, Silchar, Assam, on August 24, 2018.
- Acted as a Judge in National Science Seminar: Cachar District Level Competition on Industrial Revolution 4.0: Are we prepared? held at Ramanuj Gupta Memorial College, Silchar, Assam, on August 15, 2018, organized by 'The Greens', Silchar.
- Acted as a Judge in Aaryabhata Anusandhanatmak Vijnan Prakalpa (Investigatory Science Project)-2017-18 for the students of all the Vivekananda Kendriya Vidyalayas (VKVs) in Assam and Nagaland during January 25-26, 2018 at Bango Bhavan Silchar, organized by Vivekananda Kendriya Vidyalaya, Ramnagar, Silchar.
- Acted as a Judge in the District Level programme of 23rd Children's Science Congress, 2015 held at Guru Charan College, Silchar, Assam, on October 11, 2015, organized by Science Trial Organization, Silchar.
- Acted as a Judge in a District Level competition of National Science Seminar 2015 on 15th August, 2015 at 10:30AM in the vicinity of Ramanuj Gupta Junior College, Ambikapatty, Silchar organized by The Greens (A Social Welfare Organization), Silchar.
- Conducted *Election of Teachers' Representatives from Affiliated colleges to Academic Council of Assam University* held at G C College, Silchar on 12th September'2012 from 12 noon to 1:30PM.

16. Proficiency in Languages:

- Well versed in English.
- Amongst the Indian Languages, I am quite well versed in Bengali, Assamese and Hindi.

17. Hobbies:

• Teaching, Science Popularization, Sports (Cricket, Badminton etc.), Music (Tabla), Martial Art (Tae - Kwon - Do), Gardening etc.

18. Night Sky Observation Programme:

• Organizing Night Sky viewing programme since 2007.

List of Publications

In Journals:

- 33. A. M. Mazarbhuiya, **H. S. Das**, and P. Halder, **2021**. The Umov effect in cosmic dust analogue fluffy aggregates. Monthly Notices of the Royal Astronomical Society (MNRAS), **502**, 2536 **(2019 SCI Impact Factor = 5.356)**.
- 32. G. B. Choudhury, A. Barman, **H. S. Das**, and B. J. Medhi, **2019**. *Bok globule CB17: Polarization, extinction and distance*. Monthly Notices of the Royal Astronomical Society (MNRAS), **487**, 475 (**2018 SCI Impact Factor** = **5.231**).
- 31. O. Ivanova, I. Luk'yanyk, L. Kolokolova, **H. S. Das**, M. Husárik, V. Afanasiev, J. Svoren, V. Rosenbush, N. Kiselev, and V. Krushinsky, **2019**. *Photometry, spectroscopy, and polarimetry of distant comet C/2014 A4 (SONEAR)*. Astronomy & Astrophysics (A&A), **626**, A26 (**2018 SCI Impact Factor** = **6.209**).
- 30. P. Halder, P. Deb Roy and H. S. Das, 2018. Dependence of light scattering properties on porosity, size and composition of dust aggregates. Icarus, 312, 45 (2016 SCI Impact Factor = 3.131).
- 29. J. Paul, A. Nag, and **H. S. Das**, **2018**. Generation of sheath in magnetized plasma under the impact of slow rotation. Chinese Journal of Physics (CJP), **56**, 1121 **(2017 SCI Impact Factor = 1.051)**.
- 28. J. Paul, A. Nag, K. Devi and **H. S. Das**, **2018**. Characteristic features of double layers in rotating magnetised plasma contaminated with dust grains with varying charges. Journal of the Korean Physical Society (JKPS), **72**, 662 (**2017 SCI Impact Factor** = **0.493**).
- 27. P. Deb Roy, P. Halder and H. S. Das, 2017. Study of light scattering properties of dust aggregates with a wide variation of porosity. Astrophysics and Space Science (ASS), 362, 209 (2016 SCI Impact Factor = 1.622).
- 26. T. K. Dhar and **H. S. Das**, **2017**. Correlation among extinction efficiency and other parameters in an aggregate dust model. Research in Astronomy & Astrophysics (RAA), **17**, 118 (**2016 SCI Impact Factor** = **1.371**).
- 25. P. Halder and H. S. Das, 2017. JaSTA-2: Second version of the Java Superposition T-matrix Application. Computer Physics Communications (CPC), 221, 421 (2016 SCI Impact Factor = 3.936).
- 24. A. M. Mazarbhuiya and H. S. Das, 2017. The study of correlation among different scattering parameters in an aggregate dust model. Astrophysics and Space Science (ASS), 362, 161 (2016 SCI Impact Factor = 1.622).
- 23. A. Das, **H. S. Das**, Biman J. Medhi and S. Wolf, **2016**. *Magnetic field geometry of the large globule CB 34*. Astrophysics and Space Science (ASS), **361**, 381 **(2015 SCI Impact Factor = 1.678)**.

- 22. A. Chakraborty and **H. S. Das**, **2016**. Study of magnetic field geometry and extinction in Bok globule CB130. Astrophysics and Space Science (ASS), **361**, 321 **(2015 SCI Impact Factor = 1.678)**.
- 21. L. Kolokolova, **H. S. Das**, O. Dubovik, T. Lapyonok, and P. Yang, **2015**. *Polarization of Cosmic Dust Simulated with the Rough Spheroid Model*. Planetary and Space Science (PSS), **116**, 30 **(2014 SCI Impact Factor = 1.875)**.
- 20. A. Barman and **H. S. Das**, **2015**. Study of grain alignment efficiency and a distance estimate for small globule CB4. Research in Astronomy & Astrophysics (RAA), **15**, 953 (**2014 SCI Impact Factor** = **1.64**).
- 19. A. Das, **H. S. Das** and A. S. Devi, **2015**. Distance estimation of some selected small Bok globules. Monthly Notices of the Royal Astronomical Society (MNRAS), **452**, 389 (2013 SCI Impact Factor = 5.226).
- 18. P. Deb Roy, P. Halder, **H. S. Das** and B. J. Medhi, **2015**. *Imaging polarimetry of comets C/2013 V1 (Boattini) and 290P/Jager before and after perihelion*. Monthly Notices of the Royal Astronomical Society (MNRAS), **450**, 1770 (**2013 SCI Impact Factor** = **5.226**).
- 17. P. Deb Roy, **H. S. Das** and B. J. Medhi, **2015**. *Imaging Polarimetry of Comet C/2012 L2 (LINEAR)*. Icarus, **245**, 241 (**2013 SCI Impact Factor = 2.840**).
- 16. P. Halder, A. Chakraborty, P. Deb Roy and H. S. Das, 2014. Java application for Superposition T-matrix code to study the optical properties of cosmic dust aggregates 15. Computer Physics Communications (CPC), 185, 2369 (2012 SCI Impact Factor = 3.078).
- 15. A. Chakraborty, **H. S. Das** and D. Paul, **2014**. Study of background star polarization, and polarization efficiency of three selected Bok globules CB56, CB60 and CB69. Monthly Notices of the Royal Astronomical Society (MNRAS), **442**, 479 (**2012 SCI Impact Factor** = **5.521**).
- 14. G. Bertrang, S. Wolf and H. S. Das, 2014. Large-scale magnetic fields in Bok globules. Astronomy & Astrophysics (A&A), 565, A94 (2012 SCI Impact Factor = 5.084).
- 13. **H. S. Das**, B. J. Medhi, S. Wolf, G. Bertrang, P. Deb Roy and A. Chakraborty, **2013**. *Polarimetric studies of comet C/2009 P1 (Garradd)*. Monthly Notices of the Royal Astronomical Society (MNRAS), **436**, 3500 (**2012 SCI Impact Factor** = **5.521**).
- 12. D. Paul, **H. S. Das** and A. K. Sen, **2012.** *Imaging polarimetry of the Bok globule CB56.* Bulletin of the Astronomical Society of India (BASI), **40**, 113 **(2011 SCI Impact Factor = 2.722)**.
- 11. **H. S. Das**, D. Paul, A. Suklabaidya and A. K. Sen, **2011.** Modelling the polarization properties of Comet 1P/Halley using a mixture of compact and aggregate particles. Monthly Notices of the Royal Astronomical Society (MNRAS), **416**, 94 **(2010 SCI Impact Factor = 4.879)**.
- C. Bhattacharjee, D. Deb, H. S. Das, A. K. Sen and R. Gupta, 2011. Modelling of laboratory data of bi-directional reflectance of regolith surface containing Alumina. Publications of the Astronomical Society of Australia (PASA), 28, 261 (2010 SCI Impact Factor = 1.590).

- 9. D. Deb, A. K. Sen, **H. S. Das** and R. Gupta, **2011**. The photometric study of light scattering from the surface of alumina powder and interpretations by Hapke formula. Advances in Space Research, **48**, 1274 (**2010 SCI Impact Factor** = **1.076**).
- 8. H. S. Das & A. K. Sen, 2011. Model for cometary grains to explain optical polarization.
 J. Quant. Spectrosc. Radiat. Transfer, 112, 1833 (2011 SCI Impact Factor = 3.193).
- 7. H. S. Das, A. Suklabaidya, S. Datta Majumder and A. K. Sen, **2010.** Aggregate dust model to study the polarization properties of comet C/1996 B2 Hyakutake. Research in Astronomy and Astrophysics (RAA), **10**, 355 (**2009 SCI Impact Factor** = **0.888**).
- 6. D. Paul, S. R. Das, **H. S. Das** and A. K. Sen, **2010.** Polarisation properties of comet NEAT C/2001 Q4. Indian Journal of Physics, **84** (6), 623 (2009 SCI Impact Factor = 0.226).
- 5. **H. S. Das**, S. R. Das, and A. K. Sen, **2008.** Aggregate dust model to describe polarization properties of comet Hale-Bopp. Monthly Notices of the Royal Astronomical Society (MNRAS), **390**, 1195 (**2007 SCI Impact Factor** = **5.249**).
- 4. **H. S. Das**, S. R. Das, T. Paul, A. Suklabaidya, & A. K. Sen, **2008.** Aggregate model of cometary dust: An application to comet Levy 1990XX. Monthly Notices of the Royal Astronomical Society (MNRAS), **389**, 787 (**2007 SCI Impact Factor** = **5.249**).
- 3. H. S. Das & A. K. Sen, 2006. Polarimetric studies of comet Levy 1990XX. Astronomy and Astrophysics (A & A), 459, 271 (2005 SCI Impact Factor = 4.223).
- 2. A. K. Sen, T. Mukai, R. Gupta & H. S. Das, 2005. An analysis of the distribution of background star polarization in dark clouds. Monthly Notices of the Royal Astronomical Society (MNRAS), 361, 177 (2004 SCI Impact Factor = 5.238).
- 1. **H. S. Das**, A. K. Sen & C. L. Kaul, **2004.** The polarimetric properties of cometary dust and a possible effect of dust aging by the Sun. Astronomy and Astrophysics (A&A), **423**, 373 (**2003 SCI Impact Factor** = **3.843**).

In Special Issue:

1. **H. S. Das** and A. Barman, **2015**. Extinction map of a small globule CB 224. Asian Journal of Physics (AJP), Vol. 24, No 8, pp 1045-1048 (A special issue on Constituents of Interstellar Medium) (ISSN 0971-3093).

In Newsletter:

1. **H. S. Das**, **2018**. *Did Comet sow the seeds of Life on Earth?*. Physics Academy of North East (PANE) Newsletter (Aug 2018), Volume 4, Issue 3, pp 12–18.

In Book:

- P. Deb Roy, A. Chakraborty, H. S. Das, B. J. Medhi, S. Wolf and G. Bertrang, 2013. Polarimetric observation of comet C/2009 P1 Garradd. In Emerging Areas of Research and Development in Chemical and Physical Sciences in North East India (R. Sen & D. G. Thakurata, Eds.), pp. 20 24. Publisher: Department of Physics and Chemistry, S. S. College, Hailakandi, Assam, India (ISBN: 978-81-908204-3-3).
- 2. C. Bhattacharjee, **H. S. Das** and A. K. Sen, 2012. Study of extinction at UV range using aggregate dust model. In *Contemporary Trends of Research in Physical Sciences* (T. K. Dey & Apratim Nag, Eds.), pp 55-59. Publisher: Department of Physics, Gurucharan College, Silchar-788004, Assam, India (ISBN: 978-81-923616-0-4).

In Conferences/Symposium etc Proceedings:

- 26. A. Barman, and **H. S. Das**, 2020. Study of extinction in large globule CB3. In Proceedings of the Frontiers of Research in Physical Sciences (ISBN: 978-81-931268-5-1), held during January 19–21, 2018, organized by Dept. of Physics, Karimganj College (Assam). Edited by Sujit Tewari and Rajat Subhra Paul, 2020, p 15–19.
- 25. A. Das, T. Dhar, and **H. S. Das**, 2020. Extinction measurement of Bok globule CB27 using Near-Infrared Photometry. In Proceedings of the Frontiers of Research in Physical Sciences (ISBN: 978-81-931268-5-1), held during January 19–21, 2018, organized by Dept. of Physics, Karimganj College (Assam). Edited by Sujit Tewari and Rajat Subhra Paul, 2020, p 11–14.
- 24. A. M. Mazarbhuiya, P. Halder, **H. S. Das** and B. J. Medhi, 2017. *Imaging polarimetry of comet C/2015 V2 (Johnson)*. In *Proceedings of the National Seminar on Recent Trends in Basic Science Researches (RTBSR-2017)* (ISBN: 978-81-933690-0-5), held during September 21 23, 2017, organized by the Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam). Edited by R. Sen, D. G. Thakurata and S. G. Roy, 2017, p 174.
- 23. J. Paul, A. Nag and **H. S. Das**, 2017. A study of the distinctive behaviour of dust grains in a rotating plasma sheath. In Proceedings of the National Seminar on Recent Trends in Basic Science Researches (RTBSR-2017) (ISBN: 978-81-933690-0-5), held during September 21 23, 2017, organized by the Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam). Edited by R. Sen, D. G. Thakurata and S. G. Roy, 2017, p 144.
- 22. P. Deb Roy and **H. S. Das**, 2017. Imaging Polarimetry of the dust coma of some comets at small phase angles. In Proceedings of the National Seminar on Recent Trends in Basic Science Researches (RTBSR-2017) (ISBN: 978-81-933690-0-5), held during September 21 23, 2017, organized by the Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam). Edited by R. Sen, D. G. Thakurata and S. G. Roy, 2017, p 64.
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- 19. A. Das and **H. S. Das**, 2017. Extinction measurement of the globule CB34 using the Near-infrared Photometry. In Proceedings of the National Seminar on Recent Trends in Basic Science Researches (RTBSR-2017) (ISBN: 978-81-933690-0-5), held during September 21 23, 2017, organized by the Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam). Edited by R. Sen, D. G. Thakurata and S. G. Roy, 2017, p 13.
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- 11. A. Suklabaidya, D. Paul, **H. S. Das** and A. K. Sen, **2011.** Study of polarimetric properties of comet Levy 1990XX by mixture of compact and aggregate particles. In Proceedings of

- the 29th Meeting of the Astronomical Society of India (ISBN 978-81-922926-1-8), held during 23-25 February, 2011. ASI Conference Series, Vol. 3, Edited by P. Khare and C.H. Ishwara-Chandra, 2011, p. 99.
- 10. D. Paul, A. Suklabaidya, **H. S. Das** and A. K. Sen, **2011.** Polarimetric study of comet Halley using combined dust model. In Proceedings of the 29th Meeting of the Astronomical Society of India (ISBN 978-81-922926-1-8), held during 23-25 February, 2011. ASI Conference Series, Vol. 3, Edited by P. Khare and C.H. Ishwara-Chandra, 2011, p. 100.
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- 6. H. S. Das, **2010**. Polarization of light scattered by cometary dust particles. In Proceedings of the VI th National Conference of Physics Academy of North East (PANE) held at Department of Physics, Tripura University during 2-4 th April, 2009, p 43.
- 5. S. Datta Majumder and H. S. Das, **2010**. Study of light scattering by aggregate particles in comet C/1996 B2 Hyakutake. In Proceedings of the VI th National Conference of Physics Academy of North East (PANE) held at Department of Physics, Tripura University during 2-4 th April, 2009, p 38.
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- 3. A. K. Sen and **H. S. Das**, **2008.** The analysis of cometary polarization data using Mie and other light scattering theories. 11th Electromagnetic and light scattering Conference, Univ. of Hertfordhsire, Hatfield, UK (07- 12 September , 2008).
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- 8. S. R. Das, D. Paul and **H. S. Das**, **2014**. Study of polarization properties of Comet Bradfield 1987 P1 using aggregate dust model and its comparison with comet NEAT C/2001 Q4. Prayas An international journal of multidisciplinary studies (PIJMS) [ISSN: 2348-618X (online)], Vol 1, Issue 1, p 1-5.
- 7. H. S. Das, 2012. Career in Astronomy and Astrophysics. Souvenir: UGC Sponsored National Seminar on Emerging Areas of Research & Development in Chemical and Physical Sciences in North East India. Edited by Rupam Sen. p 3-6
- 6. D. Deb, A. K. Sen, **H. S. Das** and R. Gupta, **2011**. Light scattering from regolith containing powdered alumina: an analogue for asteroid surface scattering. Assam University Journal of Science and Technology: Physical Sciences and Technology [ISSN: 0975-2773(Print)], Vol 7 (Number II), p 128-132.
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- 4. C. Bhattacharjee, **H. S. Das** and A. K. Sen, **2010.** *Modeling of interstellar extinction by aggregates.* Assam University Journal of Science and Technology: Physical Sciences and Technology [ISSN: 0975-2773(Print)], Vol 6 (Number II), p 39-41.
- 3. A. Suklabaidya, D. Paul, **H. S. Das** and A. K. Sen, **2010.** Study of Polarization Properties Comet Levy 1990XX using BAM1 Model. Assam University Journal of Science and Technology: Physical Sciences and Technology [ISSN: 0975-2773(Print)], Vol 6 (Number II), p 120-124.
- 2. **H. S. Das** and M. Das, **2010.** Climate change and sustainable development in India . Annual Journal of Women's College [ISSN: 0975-3338], p 257-262.
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International:

- 34. **H. S. Das**, **2019**. Observation of small Solar System objects from Indian Observatories and prospects with large telescopes. Presented a paper at the Second Indo-Chilean Astronomical Dialogue, held at IUCAA, Pune from **December 3 to 5, 2019**.
- 33. **H. S. Das**, A. M. Mazarbhuiya, and B. J. Medhi, **2019**. *Imaging polarimetry of comets* 32P/Comas Sola and C/2015 V2 (Johnson). Presented a paper at the second international workshop on Advancement of polarimetric observations: calibration and improved aerosol retrievals (APOLO-2019), held at the University of Lille, Lille, France from November 4 to 7, 2019.
- 32. **H. S. Das, 2019.** Study of star formation in molecular clouds: uses of astronomical data resources and archives. Presented a paper at the International Conference on Infrared Astronomy and Astrophysical Dust (IRAAD) held at IUCAA, Pune, during **October 22 25, 2019.**
- 31. A. M. Mazarbhuiya, **H. S. Das**, and P. Halder **2019**. *Umov's law verification with the Amsterdam Light Scattering Database* Presented a paper at the *International Conference on Infrared Astronomy and Astrophysical Dust (IRAAD)* held at IUCAA, Pune, during **October 22 25, 2019**.
- 30. G. B. Choudhury, T. K. Dhar, **H. S. Das**, and B. J. Medhi, **2019.** Study of polarization efficiency in three star forming clouds. Presented a paper at the International Conference on Infrared Astronomy and Astrophysical Dust (IRAAD) held at IUCAA, Pune, during **October 22 25**, **2019.**
- 29. T. K. Dhar, G. B. Choudhury, **H. S. Das**, and B. J. Medhi, **2019.** *Imaging polarimetry of comets C/2016 R2 (PANSTARRS) and 24P/Schumasse.* Presented a paper at the *International Conference on Infrared Astronomy and Astrophysical Dust (IRAAD)* held at IUCAA, Pune, during **October 22 25, 2019.**
- 28. G. B. Choudhury, A. Barman, **H. S. Das**, B. I. Sharma, B. J. Medhi, **2018**. Study of the magnetic field geometry of a dark cloud CB17 in both optical and sub-millimeter wavelength. Presented at the international conference entitled Exploring The Universe: Near Earth Science to Extra-Galactic Astronomy (EXPUNIV2018), organized by S N Bose National Centre for Basic Sciences, Kolkata during **November 14 17**, **2018**.
- 27. A. M Mazarbhuiya, P. Halder, **H. S. Das**, B. J. Medhi, **2018**. *Polarimetric study of comets 32P/Comas Sola and C/2015 V2(Johnson) at low phase angle*. Presented at the international conference entitled *Exploring The Universe: Near Earth Science to Extra-Galactic Astronomy (EXPUNIV2018)*, organized by S N Bose National Centre for Basic Sciences, Kolkata during **November 14 17, 2018**.
- 26. O. Ivanova, L. Kolokolova, **H. S. Das**, I. Luk'yanyk, and V. Afanasiev, **2018**. *Dust environment of distant comet C/2014 A4 (SONEAR)*. Presented at the European Planetary Science Congress 2018, held on **September 16–21**, **2018** at TU Berlin, Berlin, Germany (id.EPSC2018-222).

- 25. **H. S. Das** and B. J. Medhi, **2017**. Polarimetric studies of a small Bok globule CB17. An oral presentation at the 1st international workshop on "Advancement of polarimetric observations: calibration and improved aerosol retrievals" (APOLO2017) held in Hefei, China from 24 to 27 of October 2017.
- 24. L. Kolokolova; **H. S. Das**; O. Ivanova; V. K. Rosenbush and N. Kiselev, **2017**. Spatial variations of polarization and color in comets 67P/Churyumov-Gerasimenko and 2P/Encke and their interpretation with a model of rough spheroids. A poster presentation at the American Astronomical Society, DPS meeting #49, id.414.02, held during October 15–20, 2017 at Provo, Utah.
- 23. **H. S. Das** and A. M. Mazarbhuiya, **2017**. Investigating the correlation between different parameters in an aggregate dust model. An oral presentation at the 16th Electromagnetic and Light Scattering Conference (ELS-XVI) held at the University of Maryland, College Park, Maryland, USA during **19–24 March**, **2017**.
- 22. **H. S. Das**, A. Das & B. J. Medhi, **2016**. *Magnetic field structure of a large Bok Globule CB34*. A poster presentation at the 33rd Winter School in Theoretical Physics on Exoplanets held at the Israel Institute for Advanced Studies (IIAS), at the Edmond J. Safra Givat Ram Campus, the Hebrew University of Jerusalem, ISRAEL during **December 28, 2015 to January 8, 2016**.
- 21. P. Halder, A. Chakraborty, P. Deb Roy, **H. S. Das. 2015**. The java application to study electromagnetic scattering of aggregates from micron to nano scale. A poster presentation at the XXVII IUPAP Conference on Computational Physics (CCP2015) which was held at IIT, Guwahati, jointly organized by Indian Institute of Technology (IIT), Guwahati, Assam, and Indian Institute of Mathematical Sciences (IIMS), Chennai, India from 2nd Dec 5th Dec, 2015.
- 20. P. Deb Roy, **H. S. Das** and B. J. Medhi. **2015**. *Imaging polarimetry of comets to explore the dust grain evolution at low phase angle*. A poster presentation at the *XXVII IUPAP Conference on Computational Physics (CCP2015)* which was held at IIT, Guwahati, jointly organized by Indian Institute of Technology (IIT), Guwahati, Assam, and Indian Institute of Mathematical Sciences (IIMS), Chennai, India from 2nd Dec 5th Dec, 2015.
- 19. **H. S. Das**, L. Kolokolova, O. Dubovik and T. Lapyonok, **2014**. Study of applicability of rough spheroid light-scattering model to cosmic dust. An oral presentation at the International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014) organized by Department of Physics, Tezpur University, Tezpur (India) and IUCAA, Pune (India) during **December 15–18**, **2014**, held at Tezpur University, Tezpur, India.
- 18. P. Halder, A. Chakraborty, P. Deb Roy and H. S. Das, 2014. Study of light scattering properties of aggregates of small spheres using the java application JaSTA. A poster presentation at the International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014) organized by Department of Physics, Tezpur University, Tezpur (India) and IUCAA, Pune (India) during December 15–18, 2014, held at Tezpur University, Tezpur, India.
- 17. P. Deb Roy, P. Halder, **H. S. Das** and B. J. Medhi, **2014**. *Imaging polarimetry of Comet C/2013 V1 (Boattini) and 290P/Jager at lower phase angles*. A poster presentation at the International Conference on *Interstellar Dust, Molecules and Chemistry (IDMC-2014)*

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- 16. A. Chakraborty, **H. S. Das** and D. Paul, **2014**. Study of efficiency in grain alignment of some star forming clouds. A poster presentation at the International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014) organized by Department of Physics, Tezpur University, Tezpur (India) and IUCAA, Pune (India) during **December 15–18**, **2014**, held at Tezpur University, Tezpur, India.
- 15. L. Kolokolova, **H. S. Das**, O. Dubovik, T. Lapyonok, **2014.** Survey of Photopolarimetric Properties of Dust/Aerosols Presented as an Ensemble of Rough Spheroids. A poster presentation at the American Geophysical Union's (AGU) 47th Annual Fall Meeting held at San Francisco, USA during December 15–19, 2014.
- 13. **H. S. Das**, L. Kolokolova, O. Dubovik, T. Lapyonok, **2014.** *Modeling photopolarimetric characteristics of cosmic dust using rough porous spheroid model.* A poster presentation at the 7th meeting on Cosmic Dust held at Umeda Satellite Campus of Osaka Sangyo University, Osaka, Japan during August 4 8, 2014.
- 12. **H. S. Das**, L. Kolokolova, O. Dubovik, T. Lapyonok, **2014.** *Modeling photopolarimetric properties of comet dust using Rough Spheroid Model*. A poster presentation at the Asia Oceania Geosciences Society 11th Annual Meeting (AOGS 2014) held at the Royton Sapporo Hotel in Sapporo, Hokkaido, Japan during July 28 August 01, 2014.
- 11. **H. S. Das, 2013.** *Imaging polarimetry of Comet C/2009 P1 (Garradd)*. Presented a talk at the Department of Astronomy, University of Maryland, Maryland, USA on September 24, 2013.
- 10. L. Kolokolova, **H. S. Das**, O. Dubovik, T. Lapyonok, **2013.** Modeling photopolarimetric characteristics of comet dust as a polydisperse mixture of polyshaped rough spheroids. A poster presentation at the American Geophysical Union's (AGU) 46th Annual Fall Meeting held at San Francisco, USA during December 9–13, 2013.
- 9. S. Reissl, G. Bertrang, S. Wolf, R. Banerjee, **H. S. Das**, D. Seifried, B. Körtgen, **2013**. Large & small-scale magnetic fields in star-forming regions. A poster presentation at the Protostars & Planets VI conference held at Convention Center, Heidelberg, Germany during July 15–20, 2013.
- 8. **H. S. Das**, **2012.** Development of a Virtual Scattering Laboratory Software Package to Study the Optical Properties of Cosmic Dust Aggregates. A poster presentation at the 9th International School of Planetary Science (CPS-2012) entitled Across the Earth into Exoplanets, organized by Centre for Planetary Science (CPS), Japan from June 24 to 29, 2012, held at Seapal Suma, Hyugo, Japan.
- 7. **H. S. Das**, **2011.** *Modelling Interstellar Extinction Using Aggregate Dust Model*. An oral presentation at the *International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2011)* organized by IUCAA, Pune, from Nov'22 to 25, 2011, held at IUCAA, Pune.
- 6. **H. S. Das**, **2010.** Study of Polarization Properties of Comet Halley Using a Mixture of Compact And Aggregate Particles. An oral presentation at the 7th Annual Meeting and Geosciences World Community Exhibition organized by Asia Oceania Geosciences Society (AOGS), (5 9 July, 2010), held at Hyderabad International Convention Centre.

- 5. A. Suklabaidya, D. Paul, S. R. Das, **H. S. Das** and A. K. Sen, **2010.** Modeling Cometary Dust as a Mixture of Compact and Aggregate Particles: An Application to Comet Levy 1990XX. An oral presentation at the 7th Annual Meeting and Geosciences World Community Exhibition organized by Asia Oceania Geosciences Society (AOGS), (5 9 July, 2010), held at Hyderabad International Convention Centre.
- 4. D. Paul, A. Suklabaidya, S. R. Das, **H. S. Das** and A. K. Sen, **2010.** Modeling The Polarisation Properties of Comet Levy1990XX using a Mixture of Aggregates. An oral presentation at the 7th Annual Meeting and Geosciences World Community Exhibition organized by Asia Oceania Geosciences Society (AOGS), (5 9 July, 2010), held at Hyderabad International Convention Centre.
- 3. C. Bhattacharjee, **H. S. Das**, A. K. Sen and R. Gupta, **2010.** Modelling of Laboratory data of Bi-directional Reflectance of regolith surface containing Alumina. An oral presentation at the 7th Annual Meeting and Geosciences World Community Exhibition organized by Asia Oceania Geosciences Society (AOGS), (5 9 July, 2010), held at Hyderabad International Convention Centre.
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- 83. T. K. Dhar, G. B. Choudhury, **H. S. Das**, and B. J. Medhi, 2021. *Imaging polarimetry of comets C/2016 R2 PANSTARRS and 24P/Schaumasse*. Presented at the National Seminar on Recent Trends in Basic Science Researches in North East India organized by S. S. College, Hailakandi and sponsored by Assam Science Technology and Environment Council, Guwahati during February 22–23, 2021.
- 82. G. B. Choudhury, **H. S. Das**, B. J. Medhi, J. C. Pandey, and T. K. Dhar, 2021. *Magnetic field morphology of a low latitude star-forming cloud CB188*. Presented at the National Seminar on Recent Trends in Basic Science Researches in North East India organized by S. S. College, Hailakandi and sponsored by Assam Science Technology and Environment Council, Guwahati during February 22–23, 2021.
- 81. B. Goswami, and **H. S. Das, 2020**. Study of the dependence of polarization properties of aggregates on porosity. Presented at the North-East Meet of Astronomers-2020 (NEMA-VI) organized by the Department of Physics, IIT Guwahati, Assam, India during November 10–13, 2020.
- 80. **H. S. Das, 2020**. The Umov effect in dust aggregates. An invited talk presented at the North-East Meet of Astronomers-2020 (NEMA-VI) organized by the Department of Physics, IIT Guwahati, Assam, India during November 10–13, 2020.
- 79. **H. S. Das, 2019**. Stellar structure and evolution. An invited talk presented at the Introductory Workshop on Physical Perspectives of Astronomy, organized jointly by IU-CAA, Pune and ICFAI University, Agartala, Tripura, held at ICFAI University during **October 30-31, 2019**.
- 78. **H. S. Das, 2019**. Solar System and its small bodies. An invited talk presented at the Introductory Workshop on Physical Perspectives of Astronomy, organized jointly by IUCAA, Pune and ICFAI University, Agartala, Tripura, held at ICFAI University during **October 30-31, 2019**.
- 77. **H. S. Das, 2019**. Recent polarimetric observations and space missions to comets: A review. An invited talk presented at the North-East Meet of Astronomers-2019 (NEMA-V) organized by Department of Physics, Tezpur University, Tezpur during **September 11-13, 2019**.
- 76. A. M Mazarbhuiya, **H. S. Das**, and P. Halder, **2019**. Verification of Umov's law with the Amsterdam Light Scattering Database on dust aggregates. Presented at the North-East Meet of Astronomers-2019 (NEMA-V) organized by Department of Physics, Tezpur University, Tezpur during **September 11-13**, **2019**.
- 75. T. K. Dhar, G. B. Choudhury, H. S. Das, and B. J. Medhi, 2019. *Polarimetric study of comets C/2016 R2 (PANSTARRS) and 24P/Schumasse before and after perihelion transit.* Presented at the North-East Meet of Astronomers-2019 (NEMA-V) organized by Department of Physics, Tezpur University, Tezpur during **September 11-13, 2019**.

- 74. G. B. Choudhury, **H. S. Das**, T. K. Dhar, A. M Mazarbhuiya, B. J. Medhi, and J. C. Pandey, **2019**. *Morphology of plane of sky component of the magnetic field in a Bok Globule: CB 188*. Presented at the North-East Meet of Astronomers-2019 (NEMA-V) organized by Department of Physics, Tezpur University, Tezpur during **September 11-13, 2019**.
- 73. G. B. Choudhury, T. K. Dhar, **H. S. Das** and B. J. Medhi, **2019**. Study of Magnetic Field Geometry of Some Star Forming Clouds. Presented in XXXVII Meeting of Astronomical Society of India, organized by Christ (Deemed to be University), Bengaluru during 18 22 February, 2019.
- 72. **H. S. Das**, **2018**. *Is radiation from Cell phone towers harming us?*. Delivered a lecture in DBT sponsored seven day short term training course on "Environmental Studies: An Interdisciplinary Approach", organized by Advanced Level Biotech Hub, S. S. College, Hailakandi on December 18, 2018.
- 71. **H. S. Das**, **2018**. Modeling photopolarimetric characteristics of comets based on ground-based observations and recent space missions at low phase angle and interpretation of results. An oral presentation at the North-East Meet of Astronomers-2018 (NEMA-IV) organized by Department of Physics, Assam University, Silchar during **November 26-28, 2018**.
- 70. P. Deb Roy, H. S. Das, 2018. Polarimetric study of comets from both space missions and ground based observations. Presented at the North-East Meet of Astronomers-2018 (NEMA-IV) organized by Department of Physics, Assam University, Silchar during November 26-28, 2018.
- 69. P. Halder, **H. S. Das**, **2018**. Study of light scattering properties of cosmic dust. Presented at the North-East Meet of Astronomers-2018 (NEMA-IV) organized by Department of Physics, Assam University, Silchar during **November 26-28**, **2018**.
- 68. T. K. Dhar, G. B. Choudhury, **H. S. Das**, B. J. Medhi, **2018**. *Imaging polarimetry of the comet C/2016 R2 (PANSTARRS) and 24P/Schaumasse) at low phase angle and interpretation of results*. Presented at the North-East Meet of Astronomers-2018 (NEMA-IV) organized by Department of Physics, Assam University, Silchar during **November 26-28, 2018**.
- 67. G. B. Choudhury, T. K. Dhar, **H. S. Das**, B. J. Medhi, **2018**. Study of Magnetic Field Geometry of Some Star Forming Clouds) at low phase angle and interpretation of results. Presented at the North-East Meet of Astronomers-2018 (NEMA-IV) organized by Department of Physics, Assam University, Silchar during **November 26-28, 2018**.
- 66. A. M Mazarbhuiya, P. Halder, **H. S. Das**, B. J. Medhi, **2018**. Polarimetric study of comets 32P/Comas Sola and C/2015 V2(Johnson) at low phase angle and interpretation of results. Presented at the North-East Meet of Astronomers-2018 (NEMA-IV) organized by Department of Physics, Assam University, Silchar during **November 26-28, 2018**.
- 65. **H. S. Das, 2018**. Recent developments in Astronomy & Astrophysics. An oral presentation at one day symposium to celebrate 150th birth anniversary of Prof S N Bose on **19th March, 2018**, held at Assam University, Silchar, organized by Department of Physics, Assam University in collaboration with S N Bose National Centre for Basic Sciences, Kolkata.

- 64. A. M Mazarbhuiya, **H. S. Das, 2018**. Correlation study among different scattering parameters in an aggregate dust model. Presented at the International Conference on Systems and Processes in Physics, Chemistry and Biology (ICSPPCB 2018) organized by the Department of Physics, Assam University, Silchar, India, during **March 1 3, 2018**.
- 63. G. B. Choudhury, A. Barman, **H. S. Das**, B. I. Sharma, B. J. Medhi, **2017**. Polarimetric study of the magnetic field geometry of a dark cloud CB17 in both optical and sub-millimeter range. Presented at the North-East Meet of Astronomers 2017 (NEMA-III) organized by the Department of Physics, Assam Don Bosco University and Inter-University Centre for Astronomy & Astrophysics (IUCAA), Pune during **October 5–7**, **2017** at St. Anthony's College, Shillong, Meghalaya.
- 62. A. M Mazarbhuiya, P. Halder, **H. S. Das**, B. J. Medhi, **2017**. *Imaging Polarimetric Study of Comet C/2015 V2 (Johnson)*. Presented at the North-East Meet of Astronomers 2017 (NEMA-III) organized by the Department of Physics, Assam Don Bosco University and Inter-University Centre for Astronomy & Astrophysics (IUCAA), Pune during **October 5–7**, **2017** at St. Anthony's College, Shillong, Meghalaya.
- 61. G. B. Choudhury, A. Barman, **H. S. Das**, B. I. Sharma, B. J. Medhi, **2017**. Study of the Magnetic Field Geometry of A Globule CB17 Using Both Optical and Sub-millimeter Polarimetry. Presented at the UGC sponsored National Seminar on "Recent Trends in Basic Science Research (RTBSR -2017)" held at Srikishan Sarda College, Hailakandi on **September 21 23, 2017**.
- 60. A. M Mazarbhuiya, P. Halder, **H. S. Das**, B. J. Medhi, **2017**. *Imaging polarimetry of comet C/2015 V2 (Johnson)*. Presented at the UGC sponsored National Seminar on "Recent Trends in Basic Science Research (RTBSR -2017)" held at Srikishan Sarda College, Hailakandi on **September 21 23, 2017**.
- 59. A. M Mazarbhuiya, **H. S. Das, 2016**. Investigating correlation between different scattering parameters in aggregate dust model. Presented at the IUCAA sponsored North East Meet of Astronomers 2016 (NEMA-II) organised by the Department of Physics, Tezpur University during **December 12–14, 2016**, held at the Tezpur University, Tezpur, Assam.
- 58. **H. S. Das, 2016**. Magnetic field geometry in some star forming clouds. An oral presentation at the IUCAA sponsored North East Meet of Astronomers 2016 (NEMA-II) organised by the Department of Physics, Tezpur University during **December 12–14**, **2016**, held at the Tezpur University, Tezpur, Assam.
- 57. **H. S. Das, 2015**. Near-Infrared study of large Bok Globules with TMT. An oral presentation at the Science & Instrumentation Meeting-III of Thirty Meter Telescope (TMT) project, organized by India-TMT and Department of Physics, Tezpur University during **December 01–03, 2015**, held at Tezpur University, Tezpur, Assam.
- 56. A. M Mazarbhuiya, **H. S. Das, 2015**. Light Scattering Properties of cometray dust. Presented at National Conference on Recent Trends of Research in Physics (NCRTRP-2015) held during **July 23 24, 2015**, organized by the Department of Physics, Women's College, Agartala, Tripura.

- 55. P. Halder, A. Chakraborty, P. Deb Roy, **H. S. Das**, **2015**. *Electromagnetic scattering from micron to nano scale using JaSTA*. Presented at the National conference on *Current Perspectives on Research on Chemical Sciences 2015*, organized by Department of Chemistry, Assam University, Silchar during **March 25 26**, **2015**.
- 54. **H. S. Das, 2014**. Polarimetry of comets: Recent findings from observations and modeling. An oral presentation at the National Seminar on Frontiers of Research in Physical Sciences-2014, organized by Karimganj College, Karimganj, Assam, during **September 19–21, 2014**, sponsored by BRNS, CSIR and ASTEC.
- 53. P. Halder, A. Chakraborty, P. Deb Roy, H. S. Das, 2014. Study of light scattering properties of cosmic dust using JaSTA. Presentation at the National Seminar on Frontiers of Research in Physical Sciences-2014, organized by Karimganj College, Karimganj, Assam, during September 19–21, 2014, sponsored by BRNS, CSIR and ASTEC.
- 52. P. Deb Roy, **H. S. Das** and B. J. Medhi, **2014**. *Polarimetric studies of Comet C/2012 L2 (LINEAR)*. An oral presentation at the National Seminar on *Frontiers of Research in Physical Sciences-2014*, organized by Karimganj College, Karimganj, Assam, during **September 19–21, 2014**, sponsored by BRNS, CSIR and ASTEC.
- 51. A. Das, **H. S. Das** and B. J. Medhi, **2014**. *Photopolarimetric studies of CB34 Bok globule*. An oral presentation at the National Seminar on *Frontiers of Research in Physical Sciences-2014*, organized by Karimganj College, Karimganj, Assam, during **September 19–21**, **2014**, sponsored by BRNS, CSIR and ASTEC.
- 50. A. Chakraborty, **H. S. Das** and D. Paul, **2014**. *Polarimetric study of some star forming dark clouds*. An oral presentation at the National Seminar on *Frontiers of Research in Physical Sciences-2014*, organized by Karimganj College, Karimganj, Assam, during **September 19–21, 2014**, sponsored by BRNS, CSIR and ASTEC.
- 49. A. Barman and **H. S. Das, 2014**. Study of grain alignment efficiency and distance estimate for CB4 cloud. An oral presentation at the National Seminar on Frontiers of Research in Physical Sciences-2014, organized by Karimganj College, Karimganj, Assam, during **September 19-21, 2014**, sponsored by BRNS, CSIR and ASTEC.
- 48. P. Deb Roy, **H. S. Das** and B. J. Medhi, **2014**. *Polarimetric studies of comet C/2012 L2 LINEAR*. An oral presentation at the 32nd meeting of the Astronomical Society of India (ASI)organized by Indian Institute of Science Education and Research, Mohali (IISERM) during March 20–22, 2014.
- 47. A. Chakraborty, **H. S. Das** and D. Paul, **2014**. Study of variation in polarisation power of field stars of CB56, CB60, CB69 dark clouds. An oral presentation at the 32nd meeting of the Astronomical Society of India (ASI)organized by Indian Institute of Science Education and Research, Mohali (IISERM) during March 20–22, 2014.
- 46. A. Das, A. Barman, Biman J. Medhi and **H. S. Das**, **2014**. *Imaging polarimtery of CB34 Bok globule*. A poster presentation at the 32nd meeting of the Astronomical Society of India (ASI)organized by Indian Institute of Science Education and Research, Mohali (IISERM) during March 20–22, 2014.
- 45. P. Halder, A. Chakraborty, P. Deb Roy and H. S. Das, 2014. Study of light scattering properties of cosmic dust using JaSTA. A poster presentation at the 32nd meeting of the

- Astronomical Society of India (ASI)organized by Indian Institute of Science Education and Research, Mohali (IISERM) during March 20–22, 2014.
- 44. P. Deb Roy, **H. S. Das** and B. J. Medhi, **2014**. *Imaging polarimetry of comet C/2012 L2 (LINEAR)*. An oral presentation at the 18th National Space Science Symposium (NSSS-2014) organized by Dibrugarh University, Dibrugarh, Assam from Jan 29 Feb 01, 2014.
- 43. A. Chakraborty, **H. S. Das** and D. Paul, **2014**. *Photo-polarimetric study of CB69*. A poster presentation at the 18th National Space Science Symposium (NSSS-2014) organized by Dibrugarh University, Dibrugarh, Assam from Jan 29 Feb 01, 2014.
- 42. **H. S. Das, 2014**. Recent developments of Cometary Dust Model. An oral presentation as a Resource Person at UGC sponsored National seminar on Recent trends of research and its applications in Physical sciences, held at S S College, Hailakandi, Assam on January 25, 2014.
- 41. **H. S. Das, 2014**. In search of life in the universe. An oral presentation as a Resource Person in Department of Bio-Technology (DBT) sponsored Under Graduate students' Training Workshop held at S S College, Hailakandi, Assam on January 23, 2014.
- 40. **H. S. Das, 2013**. Polarimetric observations of Comet C/2009 P1 (Garradd) from IU-CAA Girawali Observatory, Pune and ARIES Sampurnanand Telescope, Nainital. An oral presentation at the Refresher Course in Astronomy and Astrophysics on May 13, 2013, hosted by Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune.
- 39. **H. S. Das, 2013**. Cometary Polarimetry. An oral presentation as a Resource Person at Inter University Centre for Astronomy & Astrophysics (IUCAA), Pune sponsored Workshop on Infrared Astronomy, held at Tezpur University, Tezpur, Assam from 19-21 March 2013.
- 38. **H. S. Das, 2013**. Comets and its important role in solar system studies. An oral presentation as a Resource Person at Inter University Centre for Astronomy & Astrophysics (IUCAA), Pune sponsored Introductory School in Astronomy & Astrophysics, held at S S College, Hailakandi, Assam from 29–31 January 2013.
- 37. P. Deb Roy, A. Chakraborty and H. S. Das, 2012. Polarimetric observation of comet C/2009P1 Garradd. An oral presentation at the UGC Sponsored National Seminar on Emerging Areas of Research & Development in Chemical and Physical Sciences in North East India, organized by Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam) from October 16 − 18, 2012.
- 36. A. Chakraborty, P. Deb Roy and H. S. Das, 2012. Development of a software package to study the optical properties of Cosmic dust aggregates. An oral presentation at the UGC Sponsored National Seminar on Emerging Areas of Research & Development in Chemical and Physical Sciences in North East India, organized by Dept. of Chemistry and Physics, S. S. college, Hailakandi (Assam) from October 16 − 18, 2012.
- 35. **H. S. Das**, **2012**. Combined model of cometary dust: An application to comet Halley. An oral presentation at the UGC-SAP sponsored National Seminar on Dusts in Astrophysics (NSDA-2012), organized by Dept. of Physics, Assam University, Silchar from Jan 31 to Feb 02, 2012.

- 34. A. Chakraborty, P. Deb Roy and **H. S. Das**, **2012.** Development of a Virtual Laboratory to study optical properties of Cosmic dust. An oral presentation at the UGC-SAP sponsored National Seminar on Dusts in Astrophysics (NSDA-2012), organized by Dept. of Physics, Assam University, Silchar from Jan 31 to Feb 02, 2012.
- 33. C. Bhattacharjee, A. K. Sen and **H. S. Das**, **2012.** Fitting Laboratory data of bidirectional reflectance by Hapke's photometric model. An oral presentation at the UGC-SAP sponsored National Seminar on Dusts in Astrophysics (NSDA-2012), organized by Dept. of Physics, Assam University, Silchar from Jan 31 to Feb 02, 2012.
- 32. C. Bhattacharjee, A. Chakraborty, **H. S. Das** and A. K. Sen, **2012.** Study of extinction and polarization properties of star HD 147933. An oral presentation at the UGC-SAP sponsored National Seminar on Dusts in Astrophysics (NSDA-2012), organized by Dept. of Physics, Assam University, Silchar from Jan 31 to Feb 02, 2012.
- 31. R. Bhattacharjee and **H. S. Das**, **2012.** Molecules present in cometary volatiles and dusts: A spectral analysis. An oral presentation at the UGC-SAP sponsored National Seminar on Dusts in Astrophysics (NSDA-2012), organized by Dept. of Physics, Assam University, Silchar from Jan 31 to Feb 02, 2012.
- 30. D. Paul, **H. S. Das** and A. K. Sen, **2012.** Polarimetric study of Star forming Cloud CB56. An oral presentation at the UGC-SAP sponsored National Seminar on Dusts in Astrophysics (NSDA-2012), organized by Dept. of Physics, Assam University, Silchar from Jan 31 to Feb 02, 2012.
- 29. P. Deb Roy and **H. S. Das**, **2011.** Development of a Virtual Laboratory tool to reveal the light scattering properties of fractal aggregates. An oral presentation at the UGC, BRNS, DST, INSA sponsored National Seminar on Frontiers of Research in Physics, organized by Dept. of Physics, Karimganj College, Karimganj from Dec 22 to Dec 24, 2011.
- 28. A. Chakraborty and **H. S. Das**, **2011.** Development of high performance computation laboratory in the Department of Physics, Assam University, Silchar to study the light scattering properties of cosmic dust. An oral presentation at the UGC, BRNS, DST, INSA sponsored National Seminar on Frontiers of Research in Physics, organized by Dept. of Physics, Karimganj College, Karimganj from Dec 22 to Dec 24, 2011.
- 27. C. Bhattacharjee, A. Chakraborty, **H. S. Das** and A. K. Sen, **2011.** Study of extinction properties of interstellar dust. An oral presentation at the UGC, BRNS, DST, INSA sponsored National Seminar on Frontiers of Research in Physics, organized by Dept. of Physics, Karimganj College, Karimganj from Dec 22 to Dec 24, 2011.
- 26. **H. S. Das**, **2011.** Astrophysics teaching at Assam University. An oral presentation at the 29th Scientific Meeting of Astronomical Society of India (ASI 2011), (23 25 February, 2011), hosted by Pt. Ravishankar Shukla University, Raipur.
- 25. A. Suklabaidya, D. Paul, **H. S. Das** and A. K. Sen, **2011.** Study of polarimetric properties of comet Levy 1990XX by mixture of compact and aggregate particles. An oral presentation at the 29th Scientific Meeting of Astronomical Society of India (ASI 2011), (23 25 February, 2011), hosted by Pt. Ravishankar Shukla University, Raipur.
- 24. D. Paul, A. Suklabaidya, **H. S. Das** and A. K. Sen, **2011.** Polarimetric study of comet Halley using combined dust model. An oral presentation at the 29th Scientific Meeting

- of Astronomical Society of India (ASI 2011), (23 25 February, 2011), hosted by Pt. Ravishankar Shukla University, Raipur.
- 23. Arindwam Chakraborty, Parizath Debroy, **H. S. Das** and A. K. Sen, **2011.** Modelling Interstellar Extinction Using a Mixture of Compact and Aggregate Particles. An oral presentation at the 29th Scientific Meeting of Astronomical Society of India (ASI 2011), (23 25 February, 2011), hosted by Pt. Ravishankar Shukla University, Raipur.
- 22. C. Bhattacharjee, **H. S. Das** and A. K. Sen, **2011.** Study of interstellar extinction by aggregate dust model. An oral presentation at the 29th Scientific Meeting of Astronomical Society of India (ASI 2011), (23 25 February, 2011), hosted by Pt. Ravishankar Shukla University, Raipur.
- 21. C. Bhattacharjee, **H. S. Das** and A. K. Sen, **2011**. Study of extinction at UV range using aggregate dust model. An oral presentation at Contemporary Trends of research in Physical Sciences, UGC sponsored National Seminar, at GC college, Silchar on 11-12th February 2011.
- 20. D. Paul, **H. S. Das** and A. K. Sen, **2011**. Photopolarimetric study of some star forming clouds. An oral presentation at Contemporary Trends of research in Physical Sciences, UGC sponsored National Seminar, at GC college, Silchar on 11-12th February 2011.
- 19. A. Suklabaidya and **H. S. Das**, **2011**. Modeling of cometary dust as mixture of compact and aggregate particles. An oral presentation at Contemporary Trends of research in Physical Sciences, UGC sponsored National Seminar, at GC college, Silchar on 11-12th February 2011.
- 18. C. Bhattacharjee, **H. S. Das** and A.K. Sen, **2011**. A comparative study of interstellar extinction by compact spheroidal and aggregate particles. An oral presentation at Current Trends in Condensed matter physics(CTCMP-2011), at the National Seminar, of Dept. of Physics Assam University from 03-05th February 2011.
- 17. D. Paul, **H. S. Das** and A.K. Sen, **2011**. Polarimetric study of some dark star forming clouds CB3, CB25, CB39. An oral presentation at Current Trends in Condensed matter physics(CTCMP-2011), at the National Seminar, of Dept. of Physics Assam University from 03-05th February 2011.
- 16. C. Bhattacharjee, D. Deb, H. S. Das and A.K.Sen, 2010. Laboratory Studies of Bidirectional properties of regolith surface containing Alumina. An oral presentation at the 55th technical session of Assam Science Society (15th Feb, 2010), hosted by Gauhati University.
- 15. C. Bhattacharjee, A. K. Sen and H. S. Das, **2009**. Interstellar Extinction and polarisation. A poster presentation a national seminar on Contemporary Areas in Physical & Life Sciences organized by IQAC, Karimganj College, Karimganj in collaboration with CARE, Saha Institute of Nuclear Physics, Kolkata (Nov. 26-27, 2009).
- 14. S. R. Das, C. Bhattacharjee, D. Paul, A. K. Sen and **H. S. Das**, **2009**. Study of different light scattering codes to interpret the observed polarization data of comets. A poster presentation a national seminar on Contemporary Areas in Physical & Life Sciences organized by IQAC, Karimganj College, Karimganj in collaboration with CARE, Saha Institute of Nuclear Physics, Kolkata (Nov. 26-27, 2009).

- 13. D. Paul, S. R. Das, A. K. Sen and **H. S. Das**, **2009**. Polarimetric properties of comet Bradfield by aggregate model. A poster presentation a national seminar on Contemporary Areas in Physical & Life Sciences organized by IQAC, Karimganj College, Karimganj in collaboration with CARE, Saha Institute of Nuclear Physics, Kolkata (Nov. 26-27, 2009).
- 12. **H. S. Das**, **2009.** Polarization of light scattered by cometary dust particles. An oral presentation at the Sixth National Conference of the Physics Academy of the North East (PANE), (3 4 April, 2009), hosted by Tripura University.
- 11. S. Datta Majumder and **H. S. Das**, **2009.** Study of light scattering by aggregate particles in comet C/1996 B2 Hyakutake. An oral presentation at the Sixth National Conference of the Physics Academy of the North East (PANE), (3 4 April, 2009), hosted by Tripura University.
- 10. S. R. Das, D. Paul, **H. S. Das** and A. K. Sen, **2009.** Modeling the polarization properties of comet Austin and Bradfield using aggregate model. An oral presentation at the Sixth National Conference of the Physics Academy of the North East (PANE), (3 4 April, 2009), hosted by Tripura University.
- 9. D. Paul, S. R. Das, **H. S. Das** and A. K. Sen, **2009.** Polarisation properties of comet NEAT C/2001 Q4. An oral presentation at the Sixth National Conference of the Physics Academy of the North East (PANE), (3 4 April, 2009), hosted by Tripura University.
- 8. S. Datta Majumder and **H. S. Das**, **2008**. Study of light scattering by aggregate particles in comet Hyakutake. An oral presentation at the UGC and DST sponsored National Seminar on Recent Progresses in Physical Sciences held at Karimganj College, Karimganj, Assam (20 21 December, 2008).
- 7. S. R. Das and **H. S. Das**, **2008**. Aggregate dust model to describe light scattering properties of comet Halley. An oral presentation at the UGC and DST sponsored National Seminar on Recent Progresses in Physical Sciences held at Karimganj College, Karimganj, Assam (20 21 December, 2008).
- 6. **H. S. Das**, **2008.** Study of light scattering properties of cometary dust using aggregate dust model. An oral presentation at the National Symposium on Astrophysics with Spectroscopic and Photometric Data held at Assam University, Silchar in collaboration with Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune (1 2 February, 2008).
- 5. **H. S. Das**, **2007.** Scattering properties of cometary dust. An oral presentation at the Refresher Course in Astronomy and Astrophysics, (June 14, 2007), hosted by Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune.
- 4. **H. S. Das**, **2005**. Dust grain characteristics of comet Levy 1990XX. An oral presentation at the UGC sponsored State Level Conference on Recent Developments in Physical Sciences, (6 7 August, 2005), hosted by Karimganj College, Karimganj (Assam), India.
- 3. **H. S. Das**, A. K. Sen, **2004.** Polarimetric studies of comet Levy 1990XX. An oral presentation at the Fourth Conference on Physics Research in North East, (5 6 November, 2004), hosted by Gurucharan College, Silchar (Assam), India.

- 2. **H. S. Das**, **2003.** Recent developments in Cometary Science. An oral presentation at the *UGC sponsored State Level Seminar*, (15 16 February, 2003), hosted by Ramkrishna Nagar College, Karimganj (Assam), India.
- 1. **H. S. Das**, C. Bhattacharjee, A. K. Sen, R. Gupta, **2000.** Polarization properties in star forming dark clouds. A poster presentation at the 20th Meeting of the Astronomical Society of India, (15 18 November, 2000), hosted by the DDU Gorakhpur University, Gorakhpur, India.

TV Talk:

- 4. Hosted an interview with Prof Somak Roychaudhury, Director, IUCAA, Pune organized by Dooradarshan Kendra, Silchar on November 28, 2018.
- 3. Participated and hosted a live talk show with Prof S. V. Dhurandar of IUCAA, Pune organized by Dooradarshan Kendra, Silchar entitled *Gravity wave detection* on October 11, 2018 from 4:00PM 4:30PM.
- 2. Participated and hosted a live talk show organized by Dooradarshan Kendra, Silchar entitled *Dhumketur Rahasya* (Mystery of comets) on 17th February, 2011 from 05:35 06:00PM.
- 1. Participated in a live talk show organized by Dooradarshan Kendra, Silchar entitled Supermoon: Kichu Jigyasa (Supermoon) on 18th March, 2011 from 07:30 08:00PM.

Invited Talk/Popular Talk:

- 42. **H. S. Das, 2021**. *Interferometry and its application in Astronomy*. Presented at the National Science Day Celebration-2021, organized by the Department of Physics, ADP College, Nagaon, Assam on March 06, 2021.
- 41. **H. S. Das, 2020**. Amazing world of Astronomy. Presented at the one day national webinar on Astronomy for all, organized by the Department of Physics, Sao Chang College, Tuensang, Nagaland on **October 15, 2020**.
- 40. **H. S. Das, 2020**. The mystery of comets. Presented at the National Webinar on Recent advances in Physics research, organized by the Department of Physics, Govt Degree College, Dharmanagar, Tripura on **August 12, 2020**.
- 39. **H. S. Das, 2020**. The mystery of comets with reference to comet Neowise. Presented at the National Webinar on The Mystery of Comets With Reference To Neowise, organized by the Department of Physics, Kokrajhar Govt. College, Kokrajhar, Assam on **August 11, 2020**.
- 38. **H. S. Das, 2020**. Comet: the wonderful visitor to our solar system. Presented at the popular level talks and discussion meeting honouring the apparition of Comet NEOWISE, organized by the Department of Physics, Assam University, Silchar on **July 25, 2020**.
- 37. **H. S. Das, 2020**. Interferometry and its application in Astronomy. Presented at the online lecture series on Recent Advances in Fundamental and Applied Physics, organized by the Department of Physics, University of Science & Technology (USTM), Meghalaya during **June 10-14, 2020**.
- 36. **H. S. Das, 2020**. Common misconceptions in Astronomy. Presented at the One day workshop on Astronomy, organized by the Department of Physics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya (PDUAM), Eraligool, Karimganj on **March 7, 2020**.
- 35. **H. S. Das, 2020**. Space missions of India. Presented a talk at the National Seminar on Science & Technology: Rural Development, organized by Govt. Degree College, Dharmanagar and ISCA, Dharmanagar Chapter & IGNOU, SC-2602, GDC, Dharmanagar Centre, held at Govt. Degree College, Dharmanagar during **February 11–12, 2020**.
- 34. **H. S. Das, 2020**. Co-ordinate systems and time. Presented a series of talk as a **Resource Person** at the 7 day teaching learning workshop on Astronomy and Astrophysics, sponsored by Ministry of Human Resource Development, Govt. of India, supported by Astronomy Centre for Educators (ACE) of IUCAA, Pune; organized by Department of Physics, Srikishan Sarda College, Hailakandi, Assam from **January 22 to 28, 2020**.
- 33. **H. S. Das, 2018**. *Amazing Astronomy*. Presented a popular talk at Dr. A. P. J. Abdul Kalam Memorial Junior College of Science, Sonai on December 22, 2018, organized by the college in association with Department of Physics, Assam University, Silchar.
- 32. **H. S. Das, 2018**. In search of intelligent life in the universe. Presented a popular talk at S S College, Hailakandi on April 7, 2018, organized by Assam Science Society, Hailakandi Branch.

- 31. **H. S. Das, 2018**. Super Blue Blood Moon: A brief overview. Presented a popular talk at the Super Blue Blood Moon Observation Camp, organized by Cachar College, Silchar and We The People Barak Valley (an NGO), on January 31, 2018.
- 30. **H. S. Das, 2017**. Night sky observations with small telescope. Presented a popular talk at the Priencetia Coaching Center, Hailakandi on **December 6, 2017**, organized by Prescientia Coaching Centre in association with Sammilito Sanskritik Bikash Mancha, Hailakandi.
- 29. **H. S. Das, 2017**. *Night sky observation with Telescope*. Presented a popular talk at the Badarpur Vidya Mandir, Badarpur, Assam on March 4, 2017.
- 28. Dharmanagar College and school *****
- 27. Interaction programme at Dolu school and others ********
- 26. **H. S. Das, 2016**. Comet: The surprising visitor to the Solar System. Presented a popular talk at the Swarna Lakshmi Higher Secondary School, Narsingpur, Cachar in a Day long Astronomy activity training programme on **June 11, 2016**, organized by Department of Physics, Assam University, Silchar, catalyzed by Pragjyotish Amateur Astronomers' Association, Guwahati, supported by Science & Technology Department, Govt. of Assam.
- 25. **H. S. Das, 2016**. *Sky Watching with Telescope*. Presented a popular talk at the Department of Physics, Hojai College, Hojai, Assam, India on **January 18, 2016**.
- 24. **H. S. Das, 2015**. *Magic of science*. Presented a popular talk at the Rongpur R. K. M. E. School, Silchar, Assam, India on **October 15, 2015**.
- 23. H. S. Das, 2015. Science is fun. Presented a popular talk at the Vivekananda Kendra Vidyalaya, Borojalenga, Assam, India on October 09, 2015.
- 22. **H. S. Das, 2015**. In search of intelligent life in the universe. Presented an ivited talk in "Introductory workshop on Astronomy and Astrophysics" at Kohima Science College, Kohima (Nagaland) on **July 15, 2015**, organized by Department of Physics, Kohima Science College.
- 21. **H. S. Das, 2015**. Comet: The wonderful visitor to the solar system. Presented a popular talk in "Introductory workshop on Astronomy and Astrophysics" at Kohima Science College, Kohima (Nagaland) on **July 15, 2015**, organized by Department of Physics, Kohima Science College.
- 20. **H. S. Das, 2015**. Night sky observation with small telescope. Presented a popular talk at Happy Valley M. E. School, Mazargram, Cachar (Assam) on **March 7, 2015**, organized by Mazargram Youth Club and Siksha Sena.
- 19. **H. S. Das, 2015.** Are we alone in the universe?. Presented an invited talk at the Department of Physics, Karimganj College, Karimganj, Assam on **28th February, 2015** to celebrate the National Science Day.
- 18. **H. S. Das, 2014**. *In search of intelligent life in the universe*. Presented a popular talk at Vivekananda Shardha Shatabarshiki Bhawan, Dharmanagar, North Tripura on **November 9, 2014**, organized by Government Degree College, Dharmanagar and catalyzed and supported by Tripura State Council for Science and Technology.

- 17. **H. S. Das, 2014**. Comet: The spectacular visitor to solar system. Presented a popular talk at Hojai College, Hojai, Assam on **November 3, 2014**.
- 16. **H. S. Das, 2014**. Polarimetry of comets: Recent findings from observations and modeling. Presented an invited talk in a National Seminar on Frontiers of Research in Physical Sciences-2014, sponsored by BRNS, CSIR and ASTEC, on **September 19, 2014**, held at Karimganj College, Karimganj, Assam.
- 15. **H. S. Das, 2014.** Comets and its important role in solar system studies. Presented a popular talk as a Chief Guest in the magazine "Anweshan" unveiling programme of Department of Physics, Guru Charan College, Silchar on **15th May, 2014**.
- 14. **H. S. Das, 2014.** Life and works of Sir C V Raman. Presented an invited talk as a Resource Person in the National Science Day celebration programme held at Karimganj College, Karimganj, Assam on **28th February, 2014**.
- 13. **H. S. Das, 2013.** *Imaging polarimetry of Comet C/2009 P1 (Garradd)*. Presented a talk at the Department of Astronomy, **University of Maryland**, Maryland, USA on **September 24, 2013**.
- 12. **H. S. Das, 2013.** Exoplanets. Presented an invited talk at the Tarabhushan Paul Junior college of Science and Commerce, Karimganj, Assam on **29th June, 2013**.
- 11. **H. S. Das, 2013.** Application of Computer Graphics with Special Reference to Astronomy. Presented an invited talk at the Department of Computer Science and Application, Karimganj College, Karimganj, Assam on **28th February, 2013** as a Resource Person under Star College Project of DBT, Govt. of India.
- 10. **H. S. Das, 2013.** Night Sky Observation with Telescope. Presented an invited talk at the Department of Physics, Karimganj College, Karimganj, Assam on **28th February, 2013** as a Resource Person in the DBT sponsored Star College Workshop on Physics (28th Feb 2nd March, 2013).
- 9. H. S. Das, 2013. In search of life in the universe. Presented at the Scientist-Student Interaction Programme, organized by Assam Science Technology & Environment Council (DST, Govt. of Assam), in collaboration with District administration, Hailakandi; Inspector of Schools, Hailakandi; Vijnan Mandir, Hailakandi and Aryabhatta Science Centre, Hailakandi on December 22, 2012, held at Nazrul Sadan, Hailakandi.
- 8. **H. S. Das, 2012.** Science in Society. Presented at the Swarna Lakshmi H. S. School, Narsingpur, Narsingpur (Cachar, Assam) on 17th Oct'2012 as Chief Guest of the Annual Function of Aryabhatta Science Centre, Narsingpur.
- 7. **H. S. Das, 2012.** Night Sky Observation with Telescope. Presented at the R. R. Roy Memorial Hostel Campus, Silchar on 05th Feb' 2012.
- 6. **H. S. Das, 2011.** Durobikkon Jontrer Sahajye Mahakash Porjobekkon. Presented at the Saraswati Vidya Niketan Itkhola, Silchar on 13th November, 2011.
- 5. **H. S. Das, 2011.** Night Sky Observation for Beginners. Presented at the 15th Orientation Programme of North Eastern Hill University (NEHU), Shillong on 19th May, 2011.

- 4. **H. S. Das, 2011.** Night Sky Observation with Small Telescope. Presented at the R. R. Roy Memorial Hostel campus, Silchar on 25th January 2011.
- 3. **H. S. Das, 2009.** Astronomy with Telescope. Presented at the Mizoram Science Centre, Aizawl on 6th and 7th December 2009.
- 2. **H. S. Das, 2007.** Comets and its important role in solar system studies. Presented at the Dept. of Physics, North Bengal University on 27 August 2007.
- 1. **H. S. Das, 2006.** Comets: The spectacular visitors to the solar system. Presented at the Seminar on World of Astronomy, (18 November 2006), hosted by Kokrajhar Govt. College, Kokrajhar (Assam), India.