

## PROFILE

**Somnath Dasgupta.**

**J.C. Bose Fellow**

**Distinguished Visiting Professor, Indian Institute of Technology, Bombay  
(2014-16)**

**Vice Chancellor,  
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### **Professional experience:**

**A. Geologist, Geological Survey of India, 1978-1981**

**B. 32 Years Undergraduate and Postgraduate teaching experience as :**

**Lecturer in Geology, Jadavpur University, 1981-1986**

**Senior Lecturer in Geology, Jadavpur University, 1986-1990**

**Reader in Geology, Jadavpur University, 1990-1997**

**Professor in Geology, Jadavpur University, 1997-2007**

**Professor, Indian Institute of Science Education & Research, Kolkata, 2007-**

**Director, National Centre of Experimental Mineralogy & Petrology,**

**University of Allahabad, August 2010- July,2011**

**Director-in-charge, Indian Institute of Science Education & Research,**

**Kolkata September 2011-January,2012**

**Dean, Research & Development, Indian Institute of Science Education &  
Research, Kolkata, April 2012-June,2012**

### **Personal data:**

**Date of birth: 13 October, 1951**

### **Academic Qualification:**

**B.Sc. (Honours in Geological Sciences) , Jadavpur University, 1971**

**M.Sc (Applied Geology), Jadavpur University, 1974**

**Ph. D (Science), Jadavpur University, 1979.**

**Title of Ph.D thesis: A study of the geology and ore mineralisation along the Madan Kudan - Kolihan section, Khetri Copper Belt, Rajasthan, India.**

**Permanent Residence**

**WestWind, Block 4, Flat 3B, 78 Raja S.C. Mallick Road, Kolkata-700084  
Tel: 91-33-24238057**

**Research Specialization: Geochemistry, Metamorphic Petrology, Ore Geology, Precambrian Geology**

**Ph.D Guidance: 19 (Completed)**

**Research Projects:**

**Council of Scientific & Industrial Research : 3 (Completed)  
Department of Science & Technology :7 (Completed), 1 (Ongoing)  
National Science Foundation, USA – DST Collaborative Project: 1 (Completed)  
Deutsche Forschungsgemeinschaft : 1 (Completed)  
Indo-Australia Strategic Research Fund: 1 (Ongoing)**

**Awards:**

**(National)**

- 1. Recipient of University Gold Medal, 1974**
- 2. Recipient of P.N. Bose Medal from Jadavpur University, 1974**
- 3. Recipient of N.N. Chatterjee Medal from the Asiatic Society, Calcutta, 1979**
- 4. Recipient of Career Award by the University Grants Commission in 1988**
- 5. Recipient of Krishnan Medal from the Indian Geophysical Union, 1989.**
- 6. Recipient of National Mineral Award from the Government of India, 1996.**
- 7. Recipient of J.C. Bose Fellowship from the Department of Science & Technology, Government of India in 2007.**

**(International):**

- 1. Recipient of Post Doctoral Fellowship from the Government of Japan 1984-85.**
- 2. Recipient of Fellowship from the Alexander von Humboldt Foundation 1991-92, 1997, 2006, 2008, 2011.**

3. **Awarded Mercator Guest Professorship by the German Research Foundation, 2002-03.**
4. **Awarded Visiting Professorship by Hokkaido University, 2007**

**Academic Assignments abroad:**

1. **Post-Doctoral Fellow at Hokkaido University, 1984-85**
2. **Visiting Scientist to the USSR, 1989.**
3. **Alexander von Humboldt Foundation sponsored Post-Doctoral Fellow at the University of Bonn, Germany in 1991-92, 1997, and at Ruhr University, Bochum in 2006, 2008.**
4. **Visiting Scientist at the University of Bonn, Germany, 1996.**
5. **Visiting Scientist at Hokkaido University, Japan, 1998, 1999, 2006.**
6. **Visiting Scientist at University of Arizona, USA, 2001-2002.**
7. **Mercator Guest Professor at R uhr University, Bochum, Germany, 2002-2003.**
8. **Visiting Professor, Hokkaido University, Japan, 2007**

**Membership of Science Academies:**

1. **Fellow of the Indian Academy of Sciences.**
2. **Fellow of Indian National Science Academy.**
3. **Fellow of the National Academy of Sciences.**
4. **Fellow of West Bengal Academy of Science & Technology**
5. **Fellow of the Academy of Sciences for the Developing World (TWAS), Trieste, Italy**
6. **Member, American Chemical Society**

**Other Important Assignments:**

1. **Keynote Speaker on Manganese Deposits at the 8<sup>th</sup> IAGOD Conference, Ottawa, 1990**
2. **International Co-Leader of UNESCO-IGCP Project 318 (Polymetallic nodules), 1992-1995.**
3. **Co-Convenor of Session 9-7 (Proterozoic events in East Gondwana) in the 31<sup>st</sup> IGC, Rio de Janeiro, 2000**
4. **Leader of the Indian Delegation to the 31<sup>st</sup> IGC, Rio de Janeiro, Brazil, 2000**
5. **Chairman, Indian National Committee of the International Union of Geological Sciences, 2000-2003**
6. **Member, Programme Advisory Committee in Earth Sciences, Department of Science & Technology, Government of India, 1998-2000.**

7. **Member, Earth and Environmental Sciences Research Committee, Council of Scientific & Industrial Research, Government of India, 2001-2003, 2008-2011.**
8. **Council Member, Geological Society of India 2001-2003, 2010-2012**
9. **Member of the Editorial Board of the International Journal Gondwana Research 2000-2005.**
10. **Associate Editor, Precambrian Research (Elsevier, Amsterdam) 2005-2013.**
11. **Member, Programme Advisory and Monitoring Committee, Deep Continental Studies, Department of Science & Technology, Government of India, 2005-2007.**
12. **Honourary Adviser, DAAD New Delhi 2006-09.**
13. **Member, Editorial Board, Journal of the Geological Society of India, 2008-**
14. **Associate Editor, Journal of Earth System Science (Springer) 2008-2012**
15. **Member of the Editorial Board of Geological Journal (Wiley-Interscience) 2010-2013**
16. **Member of the Working Group on 12<sup>th</sup> Plan proposals for the Ministry of Earth Sciences, Government of India, 2011.**
17. **Member, Research Council, National Institute of Oceanography, Goa, 2010-2016.**
18. **Member, Programme Advisory and Monitoring Committee, Ministry of Earth Sciences, 2012-2016.**
19. **Member of the Governing Body of NCESS, Trivandrum (Ministry of Earth Sciences, Government of India).**
20. **Chairperson, Research Advisory Council, NCESS, Trivandrum (Ministry of Earth Sciences, Government of India)**

#### **Existing Research Collaborations:**

1. **University of Bonn, Germany,**
2. **Hokkaido University, Japan,**
3. **Hiroshima University, Japan**
4. **University of Arizona, U.S.A.**
5. **Ruhr University, Bochum, Germany**
6. **Carleton University, Ottawa, Canada**
7. **Polish Academy of Sciences, Krakow**
8. **University of Canberra, Australia**

## LIST OF PUBLICATIONS (Peer Reviewed) OF SOMNATH DASGUPTA

(Excluding Abstracts)

1. **Dasgupta, S.** (1978). Sedimentary structures in the Precambrian Delhi Supergroup rocks and their significance. **Indian Journal of Earth Sciences**, **5**, 177-182.
2. **Sarkar, S.C. and Dasgupta, S.** (1980). A study of the preexistent ores at the intrusive contact and the origin of the late hydrothermal veins at the Madan Kudan and Kolihan mines, Khetri copper belt, Rajasthan, India. **Neues Jahrbuch fur Mineralogie abh**, **143**, 102-112.
3. **Sarkar, S.C. and Dasgupta, S.** (1980). Geologic setting, genesis, and transformation of sulfide deposits in the northern part of the Khetri copper belt, Rajasthan, India. **Mineralium Deposita**, **15**, 117-137.
4. **Bhattacharya, P.K. and Dasgupta, S.** (1981). Evolution of massive granites in the Khetri copper belt, Rajasthan : implications in regional correlation. **Indian Journal of Earth Sciences**, **8**, 44-53.
5. **Banerjee, H., Dasgupta, S., Sarkar, S.C. and Bhattacharya, P.K.** (1983). Evolution of the lesser Himalayan Matapelites of the Sikkim-Darjeeling region, India and some related problems. **Neues Jahrbuch fur Mineralogie Abh**, **145**, 197-209.
6. **Bhattacharya, P.K., Dasgupta, S., Fukuoka, M., Hirowatari, F. and Roy, S.** (1984). Mineralogy and mineral chemistry of metamorphosed manganese oxide ores and manganese silicate-oxide rocks : the example from the Precambrian Sausar Group, India. **Proceedings 27<sup>th</sup>. International Geological Congress, Moscow, Volume 12, VNU Press**, 293-310..
7. **Dasgupta, S., Fukuoka, M. and Roy, S.** (1984). Hematite-pyrophanite intergrowth in gondites, Chilka area, Sausar Group, India. **Mineralogical Magazine**, **48**, 558-560.
8. **Dasgupta, S., Banerjee, H. and Majumdar, N.** (1984). Contrasting trends of mineral reactions during progressive metamorphism in interbanded pelite-manganese oxide sequence - example from Precambrian Sausar Group, India. **Neues Jahrbuch fur Mineralogie Abh**, **150**, 95-102.
9. **Bhattacharya, P.K., Dasgupta, S., Fukuoka, M. and Roy, S.** (1984). Geochemistry of braunite and associated Phases in metamorphosed non-calcareous manganese ores of India. **Contributions to Mineralogy and Petrology**, **87**, 65-71.
10. **Dasgupta, S., Banerjee, H. and Fukuoka, M.** (1985). Oxidation gradients in metamorphosed non-calcareous manganese ores. **Contributions to Mineralogy and Petrology**, **90**, 258-261.
11. **Dasgupta, S., Miura, H. and Hariya, Y.** (1985). Stability of Mn-cumingtonite - an experimental study. **Mineralogical Journal**, **12**, 251-259.
12. **Roy, S., Dasgupta, S., Bhattacharya, P.K., Fukuoka, M., Banerjee, H. and Majumdar, N.** (1986). Petrology of Mn silicate-carbonate-oxide rock of Sausar Group, India. **Neues Jahrbuch fur Mineralogie Abh**, **12**, 561-568.

13. Dasgupta, S., Banerjee, H., Miura, H. and Hariya, Y. (1986). Stability of braunite and associated phases in parts of the system Mn-Fe-Si-O. **Mining Geology**, **36**, 351-360.
14. Dasgupta, S., Bhattacharya, P.K., Majumdar, N., Fukuoka, M., Banerjee, H. and Roy, S. (1987). Calderite-rich garnets from metamorphosed manganese silicate rocks of Sausar Group, India, and their derivation. **Mineralogical Magazine**, **51**, 577-583.
15. Dasgupta, S., Bhattacharya, P.K., Chattopadhyay, G., Fukuoka, M., Banerjee, H. and Roy, S. (1987). Genetic reinterpretation of crystallographic intergrowth of jacobsonite and hausmannite from natural assemblages. **Mineralogy and Petrology**, **37**, 109-116.
16. Banerjee, H., Miura, H., Dasgupta, S., Hariya, Y. and Roy, S. (1987). Hollandite and cryptomelane in the manganese oxide deposits of the Sausar Group, India. **Mineralogical Journal**, **13**, 424-433.
17. Dasgupta, S., Chattopadhyay, G., Bhattacharya, P.K., Fukuoka, M., Banerjee, H., Majumdar, N. and Roy, S. (1988). Petrology of Mg-Mn amphibole bearing assemblages in manganese silicate rocks of the Sausar Group, India. **Mineralogical Magazine**, **52**, 105-111.
18. Bhattacharya, P.K., Dasgupta, S., Chattopadhyay, G., Banerjee, H., Fukuoka, M. and Roy, S. (1988). Petrology of jacobsonite bearing assemblages from Sausar Group, India. **Neues Jahrbuch fur Mineralogie Abh**, **159**, 101-111.
19. Mukhopadhyay, S., Dasgupta, S. and Roy, S. (1988). Distribution and character of micronodules in pelagic sediments from Central Indian Basin, Indian ocean and their implications. **Marine Mining**, **7**, 351-358.
20. Dasgupta, S., Chakraborti, S., Sengupta, P., Bhattacharya, P.K., Banerjee, H., Fukuoka, M. and Roy, S. (1989). Compositional characteristics of kinoshitalite from the Sausar Group, India. **American Mineralogist**, **74**, 200-202.
21. Dasgupta, S., Sengupta, P., Bhattacharya, P.K., Fukuoka, M., Banerjee, H., Mukherjee, M. and Roy, S. (1989). Mineral reactions in manganese oxide rocks: P - T - X phase relations. **Economic Geology**, **84**, 434-443.
22. Chaudhuri, A.K., Dasgupta, S., Bandyopadhyay, G., Sarkar, S., Bandyopadhyay, P.C. and Gopalan, K. (1989). Stratigraphy of the Penganga Group around Adilabad, Andhra Pradesh. **Journal of the Geological Society of India**, **34**, 291-302.
23. Sengupta, P., Dasgupta, S., Bhattacharya, P.K. and Hariya, Y. (1989). Mixing behavior in quaternary garnet solid solution and an extended Ellis and Green garnet - clinopyroxene geothermometer. **Contributions to Mineralogy and Petrology**, **103**, 223-227.
24. Dasgupta, S., Banerjee, H., Bhattacharya, P.K., Fukuoka, M. and Roy, S. (1990). Petrogenesis of metamorphosed manganese deposits and the nature of their precursor sediments. **Ore Geology Reviews**, **5**, 359-384.

25. **Dasgupta, S., Chakraborti, S., Sengupta, P., Fukuoka, M. and Roy, S.** (1990). Ca -Ba -Sr carbonates from metamorphosed manganese deposits of the Sausar Group , India and their petrologic significance . **Mineralogical Magazine , 54, 511-513 .**
26. **Dasgupta, S., Chaudhuri, A.K. and Fukuoka, M.** (1990). Compositional characteristics of glauconitic alterations of K-feldspar from India and their implications. **Journal of Sedimentary Petrology, 60, 277-281.**
27. **Sengupta, P., Dasgupta, S., Bhattacharya, P.K. and Mukherjee, M.** (1990). An orthopyroxene-biotite geothermometer and its applications in crustal granulites and mantle- derived rocks. **Journal of Metamorphic Geology, 8 ,191-197.**
28. **Roy, S., Dasgupta, S., Fukuoka, M., Mukhopadhyay, S.** (1990). Atypical ferromanganese nodules from pelagic areas of Central Indian Basin, equatorial Indian Ocean. **Marine Geology, 92, 269-283.**
29. **Sengupta, P., Dasgupta, S., Bhattacharya, P.K., Fukuoka, M., Chakraborti, S., and Bhowmick, S.** (1990). Petrotectonic imprints in the sapphirine granulites from Anantagiri, Eastern Ghats mobile belt , India . **Journal of Petrology, 31, 971-996.**
30. **Dasgupta , S ., Sengupta , P., Fukuoka , M. and Bhattacharya, P.K.** (1991) . Mafic granulites from the Eastern Ghats, India - further evidence for extremely high temperature crustal metamorphism . **Journal of Geology, 99, 124-133.**
31. **Dasgupta, S., Chakraborti, S., Sengupta, P., Fukuoka, M., Bhattacharya, P.K., Banerjee, H. and Roy, S.** (1991). Manganese rich minerals of the pumpellyite group from the Precambrian Sausar Group , India . **American Mineralogist, 76, 241-245.**
32. **Sengupta, P., Karmakar, S., Dasgupta, S., and Fukuoka, M.** (1991). Petrology of spinel granulites from Araku , Eastern Ghats ,India , and a petrogenetic grid for sapphirine-free rocks in the system FMAS. **Journal of Metamorphic Geology, 9,451-459.**
33. **Dasgupta, S., Sengupta, P., Guha, D., and Fukuoka, M.** (1991). A refined garnet-biotite Fe-Mg exchange geothermometer and its application in granulites and amphibolites. **Contributions to Mineralogy and Petrology, 109 , 130- 137.**
34. **Delian, F., Dasgupta, S., Bolton, B.R., Hariya, Y., Momoi, H., Miura, H., Jiaju, L. and Roy, S.** (1992). Mineralogy and geochemistry of the Proterozoic Wafangzi deposits , China . **Economic Geology , 87 , 1430-1440 .**
35. **Dasgupta, S., Roy, S. and Fukuoka, M.** (1992). Depositional models for manganese oxide and carbonate deposits of the Precambrian Sausar Group , India . **Economic Geology, 87, 1412-1418.**
36. **Dasgupta, S., Banerjee, H. and Bandyopadhyay, G.** (1992). Manganese deposition in the Proterozoic - the global perspective and the Indian scenario. In : Sarkar S.C.(ed) Metallogeny related to the tectonics of the Proterozoic mobile belts. **Oxford - IBH Publishing Co. New Delhi. 163-176.**

37. **Dasgupta, S., Sengupta, P., Fukuoka, M., and Chakraborti, S. (1992).** Dehydration melting , fluid buffering and decompressional P - T path in a granulite complex from the Eastern Ghats , India .**Journal of Metamorphic Geology, 10, 777-788.**
38. **Dasgupta, S., Sengupta, P., Mondal, A. and Fukuoka, M.(1993).** Mineral chemistry and reaction textures in metabasites from the Eastern Ghats belt , India , and their implications. **Mineralogical Magazine, 57, 113-120.**
39. **Dasgupta, S. (1993).** Contrasting parageneses in high temperature calc-silicate granulites :example from the Eastern Ghats , India . (1993). **Journal of Metamorphic Geology, 11, 193-202.**
40. **Dasgupta, S. and Ehl, J. (1993).** Reaction texture in a spinel-sapphirine granulite from the Eastern Ghats, India and their implications. **European Journal of Mineralogy, 5, 537-543.**
41. **Dasgupta, S., Sengupta, P., Fukuoka, M. and Roy, S.(1993)** Contrasting parageneses in the manganese silicate-carbonate rocks from Parseoni, Sausar Group, India and their interpretation. **Contributions to Mineralogy and Petrology, 114, 533-538.**
42. **Dasgupta, S., Hariya, Y. and Miura, H. (1993)** Compositional limits of manganese carbonates and silicates in granulite facies metamorphosed deposits of Garbham, Eastern Ghats, India. **Journal of Resource Geology (Japan), 17, 43-49.**
43. **Dasgupta, S., Sanyal, S., Sengupta, P. and Fukuoka, M. (1994)** Petrology of granulites from Anakapalle - evidence for Proterozoic decompression in the Eastern Ghats, India. **Journal of Petrology, 35, 433-459.**
44. **Chaudhuri, A., Chanda,S.K. and Dasgupta, S.(1994)** Proterozoic glauconitic peloids from South India : A study of their origin and significance. **Journal of Sedimentary Research, A64, 765-770.**
45. **Dasgupta, S.(1995)** Pressure-temperature evolutionary history of the Eastern Ghats granulite province : Recent advances and some thoughts. **Memoir of the Geological Society of India No.34, 101-110.**
46. **Dasgupta,S., Sengupta,P., Ehl,J., Raith,M. and Bardhan,S. (1995)** Reaction textures in a suite of spinel granulites from the Eastern Ghats Belt, India : Evidence for polymetamorphism, a partial petrogenetic grid in the system KFMASH and the roles of ZnO and Fe<sub>2</sub>O<sub>3</sub>, **Journal of Petrology 36, 435-462.**
47. **Bhowmik,S., Dasgupta,S., Hoernes,S. and Bhattacharya, P.K. (1995)** Extremely high temperature calc silicate granulites from the Eastern Ghats Belt, India : Evidence for isobaric cooling, fluid buffering and terminal channelized fluid flow. **European Journal of Mineralogy, 7, 689-703.**
48. **Dasgupta,S. and Sengupta,P. (1995)** Ultrametamorphism in Precambrian granulite terrains-evidence from Mg-Al granulites and calc-silicate granulites of the Eastern Ghats, India. **Geological Journal , 30, 307-318.**

49. **Sengupta,P., Dasgupta, S., Bhui,U.K., Ehl,J and Fukuoka, M.** (1996) Magmatic evolution of mafic granulites from Anakapalle, Eastern Ghats, India : Implications for tectonic setting of a Precambrian high grade terrain. **Journal of Southeast Asian Earth Sciences (Pergamon, U.K.), Special Issue on Precambrian India within East Gondwana, M. Yoshida, M. Santosh & M. Arima (Eds), 14, 185-198.**
50. **Dasgupta, S.** (1997) P-T-X relationships during metamorphism of manganese-rich sediments: Present status and future studies. **Geological Society of London Special Publications, K. Nicholson, J.R. Hein, B. Buhn & S. Dasgupta (Eds). 119, 327-337.**
51. **Sengupta,P., Sanyal,S., Dasgupta,S., Ehl,J, Fukuoka,M & Pal,S.** (1997) Controls of metamorphic reactions in calc-silicate granulites : evidence from Anakapalle, Eastern Ghats, India. **Journal of Metamorphic Geology, 15, 551-564.**
52. **Dasgupta,S., Guha, D., Sengupta,P & Ehl, J.** (1997). Pressure-temperature-fluid evolutionary history of the Sand Mata granulite complex, Rajasthan, India. **Precambrian Research, 83, 267-290.**
53. **Dasgupta, S., Ehl, J., Raith, M.M., Sengupta, P. and Sengupta, P.** (1997). Deep crustal contact metamorphism around the Chimakurthy mafic-ultramafic Complex, Eastern Ghats Belt, India. **Contributions to Mineralogy and Petrology, 129, 182-197.**
54. **Neogi, S., Dasgupta, S. and Fukuoka, M.** (1998). High P-T polymetamorphism, dehydration melting, generation of migmatites and granites in the Higher Himalayan Crystalline Sequence, Sikkim, India. **Journal of Petrology, 39, 61-99.**
55. **Dasgupta, S. and Sengupta, P.** (1998). Reworking of an isobarically cooled deep continental crust : evidence of decompressive P-T trajectory from the Eastern Ghats belt, India. **Indian Journal of Geology, 70, 133-144.**
56. **Dasgupta, S., Sengupta, P., Pal, S. and Fukuoka, M.** (1999) Evidence of superposed metamorphism from the Gokavaram area, Eastern Ghats belt,, and its relation with the Kemp Land Coast, East Antarctica. **Gondwana Research, 2, 227-236.**
57. **Banerjee, R, Roy, S, Dasgupta, S, Mukhopadhyay, S and Miura, H** (1999). Petrogenesis of ferromanganese nodules from east of the Chagos Archipelago, Central Indian Basin, Indian Ocean. **Marine Geology, 157, 145-158.**
58. **Sengupta, P., Sen, J., Dasgupta, S., Raith, M.M., Bhui, U.K. and Ehl, J.** (1999). Ultra-high temperature metamorphism of meta-pelitic granulites from Kondapalle, Eastern Ghats Belt: Implications for the Indo-Antarctic correlation. **Journal of Petrology, 40, 1065-1087**
59. **Dasgupta, S., Sengupta, P., Sengupta, P., Ehl, J. and Raith, M.** (1999). Petrology of gedrite-bearing rocks from the Eastern Ghats belt, India : Evidence for reworking along mid-crustal ductile shear zones., **Journal of Metamorphic Geology, 17, 765-778.**

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61. Bose, S, Fukuoka, M., Sengupta, P and Dasgupta, S. (2000). Evolution of high Mg-Al granulites from Sunkarametta, Eastern Ghats: evidence for lower crustal heating-cooling trajectory . **Journal of Metamorphic Geology, 18, 223-240.**
62. Ganguly, J, Dasgupta, S, Cheng, W and Neogi, S. (2000). Exhumation history of a section of the Sikkim Himalayas, India : records in the metamorphic mineral equilibria and compositional zoning of garnet. **Earth and Planetary Science Letters, 183, 471-486.**
63. Dasgupta, S and Sengupta, P. (2000). Tectonothermal evolution of the Eastern Ghats granulite Belt, India: A metamorphic perspective. **Geological Survey of India Special Publication No. 55, 259-274.**
64. Dasgupta, S, Sengupta, S, Bose, S, Fukuoka, M and Dasgupta, S. (2001). Polymetamorphism in the schirmacher hills granulites, east Antarctica : implications for tectonothermal reworking of an isobarically cooled deep continental crust. **Gondwana Research, 4, 337-357.**
65. Rickers, K., Raith, M. and Dasgupta, S (2001). Multistage reaction textures in xenolithic high-MgAl granulites at Anakapalle, Eastern Ghats belt, india : examples of contact polymetamorphism and infiltration-driven metasomatism. **Journal of Metamorphic Geology, 19, 563-582.**
66. Das, K., Dasgupta, S and Miura, H. (2001) Stability of osumilite coexisting with spinel solid solution in metapelitic granulites at high oxygen fugacity. **American Mineralogist , 86, 1423-1434.**
67. Mukhopadhyay, S., Roy, S., Fukuoka, M, and Dasgupta, S. (2002) Controls of evolution of mineral assemblages in ultrahigh temperature metamorphosed Mn carbonate-silicate rocks from the Eastern Ghats belt, India. **European Journal of Mineralogy , 14, 73-83.**
68. Dasgupta, S and Sengupta, P. (2002) Ultrahigh temperature metamorphism in the Eastern Ghats Belt, India: evidence from high Mg-Al granulites. **Proceedings Indian National Science Academy, 68 A, 21-34.**
69. Sarkar, S., Santosh, M, Dasgupta, S & Fukuoka, M (2003). Very high density CO<sub>2</sub> associated with ultrahigh temperature granulites from the Eastern Ghats Belt, India. **GEOLOGY, 31, 1, 51-54.**
70. Dasgupta, S & Sengupta, P (2003). Indo-Antarctic correlation: A metamorphic perspective from the Eastern Ghats Belt, India. **Geological Society of London Special Publication, No. 206, 131-142.**
71. Das, K., Dasgupta, S & Miura, H (2003). An experimentally constrained petrogenetic grid in the silica-saturated portion of the system KFMASH at high temperatures and pressures. **Journal of Petrology, 44, 1055-1075.**
72. Sarkar, S., Dasgupta, S & Fukuoka, M (2003). Petrological Evolution of a Suite of

Spinel Granulites from Vizianagram, Eastern Ghats Belt, India, and Genesis of Sapphirine – bearing Assemblages. **Journal of Metamorphic Geology**, **21**, 899-914.

73. Dasgupta, S., Ganguly, J. & Neogi, S (2004). Inverted metamorphic sequence in the Sikkim Himalayas: Crystallization history, *P-T* gradient, and implications. **Journal of Metamorphic Geology**, **22**, 395-412.
74. Bhowmik, S.K. & Dasgupta, S (2004). Tectonometamorphic Evolution of Boudin-type Granulites in the Central Indian Tectonic Zone and Northwestern India: A Synthesis and Future Perspectives. **Geological Survey of India, Special Publications**, **84**, 227-246.
75. Dasgupta, S. & Pal, S (2005). Origin of Grandite Garnet in Calc - Silicate Granulites: Mineral-Fluid Equilibria and Petrogenetic Grids. **Journal of Petrology**, **46**, 1045-1076.
76. Chakraborty, S., Dasgupta, S. & Neogi, S (2005). Generation of migmatites and the nature of partial melting in a continental collision zone setting: An example from the Sikkim Himalaya. **Indian Journal of Geology**, **75**, 38-53.
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**BOOK Editing:**

1. Co-Editor of Geological Society of London Special Publication No. 119 (1997).
2. Co-Editor of Geological Society of London Special Publication No. 206 (2003)
3. Co-Editor of “Physics & Chemistry of the Earth’s Interior”, published by the Indian National Science Academy & Springer-Verlag (2009)

**Editing Special Issues of Journals:**

1. Co-Editor of a Special Issue of Gondwana Research in 2001.
2. Co-Editor of a Special issue of the Journal of Asian Earth Sciences (Elsevier) Vol.22, No. 2, 2003.
3. Co-Editor of a Special Issue of Precambrian Research (Elsevier) on Indian Precambrians, Vol. 162, Nos. 1-2, 2008.
4. Co-Editor of a Special Issue of Geological Journal (Wiley-Interscience) on Indian Precambrians, 2012

**Development of Teaching Tool:**

Developed a software “Exploring Thermodynamics using Excel Spreadsheet” (jointly with Sumit Chakraborty), for the program “Teaching Petrology” of the American Geophysical Union.  
([http://serc.carleton.edu/NAGTWorkshops/petrology/teaching\\_examples/3578.html](http://serc.carleton.edu/NAGTWorkshops/petrology/teaching_examples/3578.html))