

Profile



Dr. BHASKAR BHOWMICK

Presently Working:

Assistant Professor at Indian Institute of Technology, Kharagpur. India.

Presently associated with Rajendra Mishra School of Engineering Entrepreneurship (<http://www.iitkgp.ac.in/departments/RJ/faculty/rj-bhaskar>) and engaged in teaching and research on Technology Entrepreneurship, Grass-root Innovation, Appropriate Technology, and Sustainability issues. Beyond class-room teaching, engaged in mentoring entrepreneurs, creating infrastructure for entrepreneurship training, and assisting government projects for funding and incubation supports. <http://www.see.iitkgp.ac.in/team-view/bhaskar-bhowmick/>

Associated Professor at Center of Excellence – Safety Engineering and Analytics, IIT Kharagpur (Since, September, 2020).

Also associated in Teaching at, Vinod Gupta School of Management (VGSOM), IIT Kharagpur, IIM Raipur, XLRI Jamshedpur, IMI Kolkata as Visiting Professor.

Academic Qualification:

Fellow in Management (PhD), Indian **Institute of Management, Ahmedabad** (2012); Program for Development of Strategic Skills, **Indian Institute of Management, Calcutta** (2006); MBA, **University of Burdwan** (1992); B.Sc. Physics, **University of Calcutta** (1989).

Thesis Topic:

Discontinuities of Environmental elements, Firm Responses, and Dynamic Capabilities: An Empirical Investigation of Interrelationships in Select Indian Manufacturing Sectors.

<https://scholar.google.com/citations?user=2wgDcT8AAAAJ&hl=en>

Industry Exposure:

Worked in Sales and Marketing Departments in Different Indian Multinationals (Threads India Limited, **Lohia Group**; **Parle Products Limited**; **Parrys Confectionery Limited**; Ultima Search, **United Phosphorus Limited**; having an **industry experience of 13 years**.

Research Areas:

Primary focus of my thesis related research is on understanding the firm environmental developments, discontinuities and uncertainties while documenting strategic responses by the start-up firms, exhibiting micro-foundations of dynamic capabilities. The area extends to the role of leaders and leadership through learning and unlearning processes in creating new paradigms. The emerging country developments promise considerable potential for research materials in this domain.

The recent engagements with Government of India projects and institutional linkages inspire application-based research exploring Innovation in Constrained Environment. The idea includes identifying and facilitating inclusive Grass-root Innovation and Appropriate Technology development towards Co-creating potential networking for sustainable

development. The Techno-Entrepreneurial- Leadership Lab engages with student, faculty, and start-up entrepreneurs in facilitating their journey and bringing lessons to academics through classroom discussions and research articles.

The research in Innovation and Entrepreneurship includes examining the domain of Innovation Ecosystem in an Emerging country context. Present research initiatives focus on identifying, conceptualizing and modelling Technology Entrepreneurship. The engagement expects larger involvements in the domain where government and non-government initiatives explore opportunities for Digital transformation identifies new roles of innovation in supporting the nation's objectives.

Research Contribution:

Primary focus of my thesis related research is on understanding the firm environmental developments, discontinuities and uncertainties, while documenting strategic responses by the start-up firms, exhibiting micro-foundations of dynamic capabilities. The area extends to the role of leaders and leadership through learning and unlearning processes in creating new paradigms. The emerging country developments promise considerable potential for research materials in this domain. My own thesis and one scholar thesis tries to understand 'Discontinuity and Uncertainty' in farm perspective. Two students' thesis is in progress in uncertainty in Supply chain logistics, and modelling techniques.

The research in Innovation and Entrepreneurship includes examining the domain of Innovation Ecosystem in an Emerging country context. The recent engagements with Government of India projects and institutional linkages inspire application based research exploring Innovation in Constrained Environment. The idea includes identifying and facilitating inclusive Grass-root Innovation and Appropriate Technology development towards Co-creating potential networking for sustainable development. One student thesis is already established the framework for grassroots innovation. Two more students are working in the area of appropriate technology.

Present research initiatives focuses on identifying, conceptualizing and modelling Technology Entrepreneurship and Entrepreneurship Ecosystem. Four book chapters are published. The engagement expects larger involvements in the domain where government initiatives indicates new roles of HEIs in supporting the nation's objectives. The Techno-Entrepreneurial-Leadership Lab engages with student, faculty, and start-up entrepreneurs in facilitating their journey and bringing lessons to academics through classroom discussions and research articles. One new subject Techno-Entrepreneurial Leadership is launched successfully.

Recently joined with a specific Research group at institute level, where multi-disciplinary research has culminated into a product (Low cost- IOT enabled, Air Quality Monitoring device) as Co-Principal Investigator driving the technology commercialization. The innovative product development experience and challenges of technology commercialization in practice gives rise to multiple research questions in the domain of knowledge.

The issue of 'Sustainability' leads the theme of current research. Although the construct encompasses a vast field of research, the challenges faced by the Micro-Small and Medium Enterprises to respond to this environmental demand with the constrained resource situation will be the thread to follow. The advancement of technology especially Industry 4.0 may

facilitate the transition of sustainable development led by the small business houses may be special interest of investigation.

Journal Publication

SL NO	JOURNAL	INDEXING
1	Dixit M. R. and Bhowmick B. (2009). Strategic Alliance in Emerging Markets: An Organizing Framework. International Journal of Knowledge, Culture and Change in Organizations. http://ijm.cgpublisher.com/product/pub.28/prod.947	Scopus SJR impact factor 0.1
2	Bhowmick B. and Mishra M. (2009). Nexus Pharmaceuticals' Teaching Case on diversification Strategies. IIM, Ahmedabad case unit. Case No. BP0326. http://www.iimahd.ernet.in/iima-cases/cases-list.html&author_id=2270	
3	Dixit M.R. and Bhowmick B. (2010). Discontinuity, Firm Response, and Dynamic capability. In working paper publication unit at Indian Institute of Management of Ahmedabad having location number W. P. No. 2010-08-03.	
4	Dixit M.R. and Bhowmick B. (2011). Discontinuities in the Environment, Firm Response, and Dynamic Capabilities. Vikalpa, 36(2) Dixit M.R. and Bhowmick B. (2010). Discontinuity, Firm Response, and Dynamic capability. In working paper publication unit at Indian Institute of Management of Ahmedabad having location number W. P. No. 2010-08-03.). http://www.vikalpa.com/article/article_browse.php?volume_id=172	SJR impact factor 0.241
5	Saurav, P., Bhowmick, B., Amrita, & Biswas, D. (2012). Development Impact Analysis of ICT Enabled Scalable Health Care Model in BRICS Economies. Technology Innovation and Management Review Journal. http://timreview.ca/issue/2012/june	ESCI Scopus ABDC- C
6	Dixit M.R. and Bhowmick B. (2013). Tata Steel: 2010, A case on Leadership and succession. IIMA Cases BP-0356. http://cases.iimahd.ernet.in/index.php/tata-sons-limited-2010.html	
7	Ghosh S. and Bhowmick B. (2014). Developing and Evaluating a New Scale for Product Positioning Uncertainty in India. International Journal Scientific and Engineering Research, Vol. 5(1). http://www.ijser.org/onlineResearchPaperViewer.aspx?Developing-and-Evaluating-a-New-Scale-for-Product-Positioning.pdf	
8	Ghosh, S. and Bhowmick, B. (2014). Perceived Environmental Uncertainty for Start-ups: A Note on Entrepreneurship Research in Indian Perspective. Technology Innovation and Management Review 4(8). http://timreview.ca/article/820	ESCI Scopus ABDC- C

9	Singh, A. and Bhowmick, B. (2015). Rural Community Development: Innovation in Process, International Journal of Rural Studies, 22 (1), 6-16.	Scopus
10	Singh. S. and Bhowmick, B. (2015). Network of Networks: A Systematic Review of Literature Constructing Rural Development. Journal of Agriculture Economics and Rural Development, 3(2):41-53. http://manuscript.sciknow.org/uploads/jaerd/pub/jaerd-1409681109.pdf	
11	Ghosh, S. and Bhowmick, B. (2015). Mind Your Product-Market Strategy on Selecting Marketing Inputs: An Uncertainty Approach in Indian Context. International Journal of Social, Behavioral, Educational, Economic and Management Engineering, 9(5), 1701-1717.	
12	Chandra, P., Bhattacharjee, T. and Bhowmick, B. (2016). Does technology transfer training concern for agriculture output in India? A critical study on a lateritic zone in West Bengal. Journal of Agribusiness in Developing and Emerging Economies.	ESCI Scopus EMERALD Impact factor-2.0
13	Singh, S. and Bhowmick. B. (2016). Innovation Network for Entrepreneurship Development in Rural Indian Context: Exploratory Factor Analysis. International Journal of Innovation and Technology Management, 13(4), 1-20	ESCI ABDC- C WORLD SCIENTIFIC SCImago Journal Rank (SJR): 0.324
14	Singh, A. and Bhowmick, B. (2017). An Exploratory Study on Technological Innovation for Entrepreneurship Development in Rural-Non-Farm Sector in India. (Emerald), Journal of Enterprising Communities: People and Places in the Global Economy 12 (3). International Journal of Innovation and Technology Management	ESCI Scopus Impact factor-3.9
15	Chandra, P., Bhattacharya, T., Bhowmick, B. (2018). Do Knowledge Deficiency Factors Steer Agricultural Extension? Institutional Evidence from Red Lateritic Zone in India. International Journal of Tropical Agriculture (IJTA), 33(4), 3025-3029.	Scopus Emerald Impact factor - 3.41
16	Chandra, P., Bhattacharya, T., Bhowmick, B. (2018). Will redesigning of resource deployment process develop capacity of small & marginal Indian farmers? International Journal of Research in Engineering, IT and Social Sciences. 243-253.	

17	Patnaik, J., & Bhowmick, B. (2018). Appropriate Technology: Revisiting the Movement in Developing Countries for Sustainability. International Journal of Urban and Civil Engineering, 12(3), 308-312. (DOI): doi.org/10.5281/zenodo.1316135	
18	Singh, S., Sindhav, B., Eesley, D., and Bhowmick, B. (2018): Investigating the role of ICT intervention in grassroots innovation using structural equation modeling approach. Sadhana, 43(7), 1-14.	SCIE SC Imago 0.465
19	Patnaik, J., & Bhowmick, B. (2019). Revisiting appropriate technology with changing socio-technical landscape in emerging countries. Technology in Society. 57, 8-19.(DOI-10.1016/j.techsoc.2018.11.004)	SSCI Scopus ABDC - C Elsevier, Impact Factor- 4.192
20	Singh, S., Sindhav, B., Eesley, D., and Bhowmick, B. (2021): Grassroots innovation and entrepreneurial success: Is entrepreneurial orientation a missing link? Technological Forecasting and Social Change. 164 (March 2021). 1-17. https://www.sciencedirect.com/science/article/pii/S0040162517315457	SSCI Scopus ABDC - A Elsevier, Impact Factor- 8.593
21	Singh, A., Maiyar, L., and Bhowmick, B. (2019). Assessing the Appropriate Grassroots Technological Innovation for Sustainable Development. Technology Analysis & Strategic Management. 32(2). 175-194. https://www.tandfonline.com/doi/full/10.1080/09537325.2019.1646420	SSCI Scopus ABDC- B Taylor & Francis Impact Factor- 2.874
22	Singh, S., and Bhowmick, B. (2019): Determinants of Grassroots Innovation: An empirical study in the Indian Context, Innovation: Organization and Management journal, 21(4).270-279. (https://www.tandfonline.com/doi/full/10.1080/14479338.2019.1685887)	SSCI Scopus Taylor & Francis Impact Factor- 2.372
23	Singh, S., Sindhav, B., Eesley, D., and Bhowmick, B. (2020): Assessing the Appropriate Grassroots Technological Innovation for Sustainable Development. Technology Analysis & Strategic Management. 32 (2). 1-20. https://www.tandfonline.com/doi/full/10.1080/09537325.2019.1646420	SSCI Scopus ABDC-B Taylor & Francis Impact Factor- 3.168
24	Pasayat, Ajit Kumar, Bhaskar Bhowmick, and Ritik Roy. (2020). Factors Responsible for the Success of a Start-up: A Meta-Analytic Approach." IEEE Transactions on Engineering Management. September, 2020. 1-11. https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9184880	SCIE Scopus ABDC- A IEEE Transaction Impact Factor- 6.146
25	Ghatak, A., Chatterjee, S., & Bhowmick, B. (2020). Intention towards digital social entrepreneurship: An integrated model. Journal of Social Entrepreneurship, 1-21.	SSCI ABDC- B

	https://www.tandfonline.com/doi/full/10.1080/19420676.2020.1826563	Taylor & Francis Impact Factor- 2.874
26	Patnaik, J., & Bhowmick B. (2020). The Role and Significance of Academic Institutions for Managing Technology Development and Diffusion at the Rural Level. <i>International Journal of Innovation, Management and Technology</i> , 11(5), 150-154. DOI: 10.18178/ijimt.2020.11.5.894.	
27	Patnaik, J., & Bhowmick B. (2020). Promise of inclusive innovation: A Re-look into the opportunities at the grassroots. <i>Journal of Cleaner Production</i> . 259. 1-15. https://www.sciencedirect.com/science/article/pii/S0959652620311719 .	SCIE Scopus ABDC- A Elsevier, Impact Factor- 9.297
28	Patnaik, J., & Bhowmick B. (2021). Determining Appropriateness for Management of Appropriate Technology: An Empirical Study using Factor Analysis. <i>Technology Analysis & Strategic Management (CTAS)</i> .34(2). 125-137. DOI: 10.1080/09537325.2021.1890013. https://www.tandfonline.com/doi/full/10.1080/09537325.2021.1890013	SSCI Scopus ABDC-B Taylor & Francis Impact Factor- 3.168
29	Ghatak, A., & Bhowmick, B. (2021). Should I Start My Own Venture? Moderating Effect of Pull Factors on the Relationship of Push Factors with Women Entrepreneurial Intentions. <i>Entrepreneurship Research Journal</i> . September 2021. 1-45. DOI: 10.1515/erj-2021-0062/html	SSCI Scopus ABDC-B De Gruyter Impact Factor- 2.1
30	Rosalin Sahoo, Bhaskar Bhowmick & Manoj Kumar Tiwari (2021) Developing a model to optimise the cost of consolidated air freight considering the varying scenarios, <i>International Journal of Logistics Research and Applications</i> . December, 2021. 1-25. https://www.tandfonline.com/doi/full/10.1080/13675567.2021.2010682	SSCI Scopus ABDC-B Taylor & Francis Impact Factor- 4.3
31	Rosalin Sahoo, Ajit Kumar Pasayat, Bhaskar Bhowmick, Kiran Fernandes & Manoj Kumar Tiwari (2022) A hybrid ensemble learning-based prediction model to minimize delay in air cargo transport using bagging and stacking, <i>International Journal of Production Research</i> . 60(2). 644-660. https://www.tandfonline.com/doi/full/10.1080/00207543.2021.2013563	SCIE Scopus ABDC-A Taylor & Francis Impact Factor- 8.568
32	Basu, P, Banerjee, S., Bhowmick, B., & Dan P. K., (2022) Sustainable Organizational Performance Through Lean Implementation Regimen Emanating from Product Innovation Factors: A Study in Indian Context. <i>International Journal of Innovation and Sustainable Development</i> . 16(2). 244-266. https://www.inderscience.com/info/inarticle.php?artid=121874 DOI: 10.1504/IJISD.2022.121874	ESCI Inderscience Impact Factor- 0.65

33	Banerjee, S., Bhowmick, B., & Dan P. K., (2022). Role of Academic Initiatives for Technology Management at the Base of the Pyramid: Empirical Evidence from India. International Journal of Innovation and Technology Management. DOI: 10.1142/S0219877022500158 (Accepted for Publication. In press).	ESCI World Scientific Impact Factor- 0.65
34	Singh, Sonal & Bhowmick, B, Excavating the black box of techno-entrepreneurial leadership in Indian context. International Journal of Knowledge Management. (Accepted for Publication. In press).	ESCI ABDC- C IGI GLOBAL

Book Chapters

SL NO	BOOK CHAPTERS
1	Biswas, D., and Bhowmick, B. (2012). Creating and Managing an Innovation Ecosystem, (in) Academic Entrepreneurship and Technological Innovation: A Business Management Perspective, IGI-Global Publication. http://www.igi-global.com/book/academic-entrepreneurship-technological-innovation/66391
2	Singh, S. and Bhowmick, B. (2015). A study on Evaluating Factors of Community Innovation in Rural Indian Context by Eleventh Biennial Conference on Entrepreneurship, Bookwell, Vol. I (401-409), (2015).
3	Ghosh, S. and Bhowmick, B. (2015). Academic Entrepreneurship in Emerging Economy Context. Competitive Strategies for Academic Entrepreneurship: Commercialization of Research-Based Products, 29-50. IGI Global, USA. http://www.igi-global.com/book/competitive-strategies-academic-entrepreneurship/124015 .
4	Chandra, P., Bhattacharjee, T. and Bhowmick, B. (2016). Perspective of Precision Agricultural Technology in Lateritic Zones of West Bengal: Role of KVKs and Farmers' Clubs. Section II: Natural Resource Engineering and Management, Precision Farming and Resource Management. Excel India Publishers, New Delhi, India, pp. 177-194.
5	Chandra, P., Bhattacharjee, T. and Bhowmick, B. (2017). Is It Crucial to Upgrade the Extension System for Capacity Development of Farmers? Learning from Dry-Lateritic Zone in India. Chapter 26, Agricultural Extension: Techniques and Applications. Biotech Books, New Delhi, India, pp. 217-228.
6	Bhowmick, B. and Ghosh, S. (2017). Innovation and Commercial Orientation: A Case of Premier Technology Institution in India. In Book, Handbook of Research on Technology-Centric Strategies for Higher Education Administration. Purnendu Tripathi and Siran Mukerji. Chapter, 16 (pp. 275-294). http://www.igi-global.com/book/handbook-research-technology-centric-strategies/176902 .
7	Singh, S. and Bhowmick, B. (2017). Research on Rural Innovation in India: Evaluating Factors of Micro-finance Innovation by Innovative Management Solutions for Competitive Advantages, Indian Publication House. New Delhi, 74-87.
8	Bhowmick, B., & Sahoo, R. (2019). Academic Entrepreneurship and Its Challenges: A Re-Look into Indian Technology University Context–Role of Indian Technological Universities in Academic Entrepreneurship. In Handbook of Research on Challenges and Opportunities in Launching a Technology-Driven International University (pp. 321-337). IGI Global.

Conference Papers

SL NO	Conference
1	Amrita, Bhowmick, B. and Biswas, D. (2011). Determining Social Media Components for Scalable Healthcare, December 13th -15th EBRF 2011,Finland. https://www.dropbox.com/s/0xx566ipae0lhwf/EBRF_2011_Proceedings_1.pdf
2	Kumar, S., Amrita., Bhowmick B. and Biswas D. (2011). Architecture of Tertiary Healthcare Delivery Model for Sub-Urban/Rural India. IEEE Global Humanitarian Technology Conference (GHTC), 30th October- 1st November, Seattle, Washington USA. (http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6103639&tag=1
3	Saurabh, P., Bhowmick, B. and Biswas, D. (2011). Developmental Impact Analysis of ICT Enabled Scalable Health Care Model in BRICS Economies, December 13th -15th EBRF 2011, Finland. https://www.dropbox.com/s/0xx566ipae0lhwf/EBRF_2011_Proceedings_1.pdf
4	Kumar, S., Bhowmick, B. and Biswas, D. (2011). Innovation and Value-co-Creation Through Structured Incubation Network, EBRF Conference, December 14-15, 2011, Aalto University, Finland. http://herkules.oulu.fi/isbn9789514298653/isbn9789514298653.pdf
5	Ghosh, S., Bhowmick, B., and Biswas, D.(2011). Technology Adaptation in Accessible Health Care: Conceptualizing System Architecture in Emerging Market Context. December 14-15, EBRF 2011,Aalto University, Finland. https://www.dropbox.com/s/0xx566ipae0lhwf/EBRF_2011_Proceedings_1.pdf
6	Ghosh, S., Singh, S.,Amrita, Kumar, S.,Bhowmick, B., and Biswas, D. (2011). Strategic Impact of Telemedicine for a Scalable Health Delivery Model”, Strategic Impact of Telemedicine for Scalable Health Delivery Model, EuroMot, Temper, Finland.
7	Kumar, S., Amrita, Bhowmick, B., and Biswas, D. (2012). Building network model of co-incubation: Role of business architecture and business intelligence, Knowledge Globalization Conference January 5-7, FLAME Pune, India. http://www.kglobal.org/files/Updated-Pune_Proceedings-2012-3.pdf
8	Ghosh, S., Singh, S., Bhowmick, B., and Biswas, D. (2012). Incubation and Technology Adaptation for Growth of Firm. Knowledge Globalization Conference, January 5-7, , FLAME Pune, India. http://www.kglobal.org/files/Updated-Pune_Proceedings-2012-3.pdf
9	Ghosh, S. and Bhowmick, B. (2014). Technological Uncertainty : Exploring Factors in Indian Start-ups. IEEE Global Humanitarian Technology Conference, October 10-13, California. USA. http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6970317&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D6970317
10	Ghosh, S. and Bhowmick, B. (2014). Product-Market Strategy Uncertainty for Start-Ups in Indian Market. 26th International Business Research Conference, April 7-8, Imperial College, London.
11	Ghosh, S. and Bhowmick, B. (2014). Identifying Product Positioning Uncertainty Factors for Start-Ups in Indian Market. Advances in Business-Related Scientific research Conference, March 26-28, Venice, Italy
12	Ghosh, S. and Bhowmick, B. (2014). Identifying factors for Market Uncertainty: an Empirical Study for Start-ups in India. 5th Asia-Pacific Business Research Conference, 17 – 18 February, Kuala Lumpur, Malaysia

13	Ghosh, S. and Bhowmick, B. (2014). Social-Self-Identity Factors: Exploration towards a New Scale Evaluation. Advances in Business-Related Scientific research Conference March 26-28, Venice, Italy
14	Ghosh, S. and Bhowmick, B. (2014). Developing and Testing New Market Uncertainty Scale for Indian start-ups. ISIS-Paris International Multidisciplinary Academic Conference, Institute of Strategic and International Studies, May 11th – 13 2014, Paris
15	Ghosh, S. and Bhowmick, B. (2014). Smart Healthcare Delivery System: An Innovation in Rural West Bengal. Exploria 30th January, MIT-SOM, Pune, [ISSN 0976-8262]
16	Ghosh, S. and Bhowmick, B. (2014). Measuring Social-self-identity Uncertainty in Indian Start-ups. The Fourteenth International Conference on Knowledge, Culture, and Change in Organizations, Saïd Business School, University of Oxford, Oxford, United Kingdom.
17	Ghosh, S. and Bhowmick, B. (2014) Developing New Market Uncertainty Scale for Indian Start-ups, 2nd International conference on Business Analytics and Intelligence 18-20 Dec, ICBAI, 2014.
18	Ghosh, S. and Bhowmick, B. (2014). Uncertainties in Entrepreneurship Climate (2014) A Study on Start-ups in India. Procedia - Social and Behavioral Sciences, Elsevier, 150 (014) 46 – 55. http://www.sciencedirect.com/science/article/pii/S1877042814050551
19	Singh, S. and Bhowmick, B. (2015). An Exploratory Study for Conceptualization of Rural Innovation in Indian Context. Procedia- Social and Behavioral Sciences, Elsevier, 207, 807 – 815.
20	Singh, S. and Bhowmick, B. (2015). Research on Rural Innovation in India: Evaluating Factors of Microfinance Innovation. 8th ISDSI International Conference, Pune, Maharashtra, India.
21	Singh, S. and Bhowmick, B. (2015). A study for conceptualization of technological innovation in rural Indian context. Third International Conference on Innovation and Creativity at Grassroots, IIM Ahmedabad, (2015)
22	Chandra, P., Bhattacharjee, T. and Bhowmick, B. (2015). Role of Non-formal Educational Leadership in Technology Transfer for Agrarian Community in the Economically Challenged Area in Jungalmahal. National Seminar on Educational Leadership, June 01-03, 2015, Centre for Educational Technology (CET), IIT Kharagpur.
23	Patnaik, J., & Bhowmick, B. (2015). A study with Evaluating factors of Community Innovation in Rural Indian Context: Exploratory Factor Analysis. 11th Biennial Conference of Entrepreneurship, February, 2015.
24	Singh, S. and Bhowmick, B. (2015). A study on Evaluating Factors of Community Innovation in Rural Indian Context. Proceedings of 11 th Biennial Conference on Entrepreneurship, Bookwell I, 401-409.
25	Chandra, P., Bhattacharjee, T. and Bhowmick, B. (2016). Does technology transfer training really a concern for agriculture output in India? A critical study on dry lateritic zone in West Bengal. International Conference on Agribusiness in Emerging Economies (ICAEEF), January 06-07, Institute of Rural Management Anand (IRMA), Gujarat, India.
26	Chandra, P., Bhattacharjee, T., Bhowmick and Sen, R.K. (2016). Technology Transfer for Resource-Constrained Farming Communities: Perspective and Future Direction. IEEE GHTC, October 13-16. Seattle, Washington, USA,
27	Chandra, P., Bhattacharjee, T. and Bhowmick, B. (2016). Mobile Technology: An Activating Tool for Capacity Development of Agricultural Supply Chain in India.

	International Conference on E-Business and Supply Chain Competitiveness (EBSCC 2016), February 12-14, Department of Industrial & Systems Engineering, IIT Kharagpur; IIT Kharagpur.
28	Singh, Sonal, Bhaskar Bhowmick, Dale Eesley, and Birud Sindhav (2017), "The Role of Marketing Innovation as a mediator in the relationship between Grassroots Innovation (GRI) and Entrepreneurship Development," International Conference on Management Practices and Research (ICMPR), Apeejay School of Management, New Delhi, July 21, 2017.
29	Singh, Sonal, Dale Eesley, Bhaskar Bhowmick, and Birud Sindhav (2017), "Impact of Grassroots Innovation on Entrepreneurial Orientation in Indian Context" 58th Meeting of the Mountain Plains Business Conference, University of Nebraska at Omaha, September 8-9, 2017.
30	Singh, S. and Bhowmick, B. (2017). Community Collaboration: Roles as its Implication in Grassroots Innovation Strategy. Strategic management Society Conference, Costa Rica, USA. 14-16 December, 2017.
31	Chandra, P., Bhattacharjee, T. and Bhowmick, B. (2017). Farmer-Centered Redesigning of Agricultural Resources: The Priori of Sustainable Agribusiness. 5th Pan-IIM World Management Conference, IIM Lucknow, December 14-16, 2017.
32	Chandra P., (rudra) T. B., Bhowmick B (2018). Impact of Technology Transfer Training Challenges on Capacity Building of Farmers in Rural India. ICCMSO 2018.
33	Chandra, P., Bhattacharjee, T., & Bhowmick, B (2018). Will redesigning of resource deployment process develop capacity of small & marginal Indian farmers? International Conference on Sustainability Development - A Value Chain Perspective.
34	Patnaik, J., & Bhowmick, B. (2018, December). Appropriate Technology and Management for Sustainability. In 2018 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) (pp. 1289-1292) (DOI: 10.1109/IEEM.2018.8607424)
35	Patnaik, J., & Bhowmick, B. (2019). Innovation Management in a Constraint Environment: Challenges in the Age of Sustainability. The European Proceedings of Social and Behavioral Sciences (EpSBS), 10, 101-112. doi: https://doi.org/10.15405/epsbs.2019.10.02.10 . ISSN: 2357-1330.
36	J. Patnaik and B. Bhowmick (2019), "Practice of Innovation Management Enabling Technology Adoption and Diffusion at the Grassroots". IEEE TEMS International Symposium on Innovation and Entrepreneurship (TEMS-ISIE), Hangzhou, China. DOI-10.1109/TEMS-ISIE46312.2019.9074476.
37	S. Banerjee, B. Bhowmick and P. K. Dan, (2020). "A Systems Theory Based Framework for Technology Management in an Indian Academia Based Organization: Case Study on RuTAG IIT Delhi," 2020 9th International Conference on Industrial Technology and Management (ICITM), Oxford, United Kingdom, 2020, pp. 6-10. doi: 10.1109/ICITM48982.2020.9080354 http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9080354&isnumber=9080341
38	Sharma, A., Bhowmick, B., & Patnaik, J. (2020, September). Innovation Through hub and Spoke Model: E-Commercializing Regional India's Handicraft Industry. In European Conference on Innovation and Entrepreneurship (pp. 614-XXI). Academic Conferences International Limited.
39	Pasayat, A. K., & Bhowmick, B. (2021, May). An evolutionary algorithm-based framework for determining crucial features contributing to the success of a start-up.

	In 2021 IEEE Technology & Engineering Management Conference-Europe (TEMSCON-EUR) (pp. 1-6). IEEE.
40	Sahoo, R., Bhowmick, B., & Tiwari, M. K. (2021, December). Simulating the Impact of COVID-19 Scenarios on Air Freight Logistics Supply Chain. In 2021 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) (pp. 280-283). IEEE.
41	Sahoo, R., Bhowmick, B., & Tiwari, M. K. (2021, September). Smart Integration of Blockchain in Air Cargo Handling for Profit Maximization. In IFIP International Conference on Advances in Production Management Systems (pp. 107-114). Springer, Cham.

Conference Participation:

- Presented paper in International Conference on Knowledge, Culture and Change in Organizations, on August 2008, at Cambridge University, UK.
http://ijm.cgpublisher.com/products_index
- Organized and actively participated in Doctoral Consortium, January 2008 at IIMA.
- Presented Research Proposal Paper in Doctoral Consortium of Strategic Management Society Conference, on December 2008, at ISB Hyderabad (India).
- Presented Research Proposal Paper in Doctoral Consortium at BPS Division of Academy of Management Conference on August, 2009 at Chicago.
- Presented Paper in International Strategic Management Conference, at Rome, 2015.

Project

- **Project Title:** Techno Entrepreneurial Leadership: Success, Sustenance and Succession Issues in Indian MSMEs. Principal Investigator (TLI): Sponsor: ISIRD, SRIC IIT Kharagpur. Completed. (Value: INR, 13,15,000)
- **Project Title:** Prime Minister Yuva Yojana (PUY). Position: Principal Investigator: Sponsor: Ministry of Skill Development and Entrepreneurship, Govt. of India. On-going. (Value: INR 44,20,000)
- **Project Title:** Technology Innovation and Development of Entrepreneurs (TIDE). Position :Co-Principal Investigator. Sponsor: Department of Electronics and Information Technology, Govt. of India. Completed. (Value: INR 1,55,00,000)
- **Project Title:** Payment of Seed Loans for Technology Incubation & development Enterprise, Department of Electronics and Information Technology, Govt. of India. Completed. (Value: INR 1,25,00,000)
- **Project Title:** Air Quality Monitoring Prototype (AQN_NNK) as Co-Principal Investigator Funded by MEITY (GoI). (Value: INR 1,01,00,000)

Entrepreneurial Associations: Mentoring Start-ups

Mitrika Infotech Pvt. Ltd.

<https://prakritifresh.com/>

Mitrika provides a one stop solution for the farmer to access supports right from seed selection to product sale and for the consumer to have all sort of chemical free agro produce. The startup is designed and formulated by M.Tech student Mr. Bipradeep Das, who is an integral part of TEL Lab.

Aspen Bower

<http://aspenbower.com/>

AB believes perfect products come out when right blend of Art and Engineering happens. Evolution is usually a process of gradual refinement. Rarely does evolution take a big leap. With EVs we have been blessed with this opportunity. With the introduction of new technologies in any domain, there exists an opportunity to re-write the proverbial rule-book. EVs could very well become the reset button that wipes all flaws of the decadent automobile sector. (<http://aspenbower.com/#services>)

iB HUBS

<https://ibhubs.co/>

iB Hubs philosophy is “Spread the light”. Our focus is on creating and implementing solutions, rather than just debating problems. Our vision is to develop a culture of innovation and entrepreneurship in every nook and corner of India. Our mission is to establish 500 hubs with 4 spokes each, making it 2500 centres across India by 2019. We are a strong team of 1000+ people with 230+ full-time individuals including management professionals, engineers, doctors, chartered accountants and designers. Most members of our team are alumni from premier institutions like IITs, IIMs, NITs, IIIT Hyderabad, BITS Pilani etc. with work experience in MNCs like Amazon, Microsoft, Intel, Qualcomm, HP, Nvidia, IBM, Samsung, Bosch etc

Business Club

<https://bclub.co.in/>

Business Club is IIT Kharagpur's in-campus society for all things business. A student run forum, we have built an analytical framework through our technical background which we apply in domains related to business and allied activities. It is a family for its 50+ members, who meet bi-weekly to discuss happenings from the business world from across the globe. The growth of individuals and their performance on the knowledge front along with setting the club as a platform for people to come together to exchange and discuss ideas has always been our aim. We set out at the beginning of the academic year to do just the same.

Suncraft Energy Private Limited

<https://www.suncraftenergy.net/>

Suncraft Energy Infra is a comprehensive EPC solutions provider. It offers the expertise as well as the tools to commission and execute solar projects of any proportion on a India basis from conceptualization to completion while catering to the custom requirements of clients.

Gopali Youth Welfare Society

Swarnis.com

<http://www.swarnis.com/>

Swarnis is a professional graphic designing company that offers high quality designs at affordable prices. Swanris has carved a niche for itself through a perfect symbiosis between the highest parameters of creative designing, printing and quality maintenance. It encompasses a wide range of clients' requirements giving priority to prompt and quality services.

Infinity Box

<https://www.infinityboxkgp.com/>

A revolutionizing solution aimed towards creating a circular economy for reusable and recyclable environment-friendly food packaging containers.

Cuvette Technologies

<https://cuvette.tech/>

Cuvette is the world's first talent pooling platform for Students, Freelancers & Companies. Our AIM is to develop a collaborative network of experienced freelancers, verified companies & highly trained students to work among themselves on one platform

CEL India

<http://www.celindia.co.in/drupal7/>

Central Electronics Limited is a Govt. of India Enterprise under the Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology. It was established in 1974, with an objective to commercially exploit indigenous technologies developed by National Laboratories and R&D Institutions in the country. CEL has developed a number of products for the first time in the country through its own R&D efforts and in close association with the premier National & International Laboratories including Defense Laboratories.

Gopali Youth Welfare Society

<https://www.gyws.org/>

Gopali Youth Welfare Society is a registered non-governmental voluntary organization primarily managed by some students and faculty members of IIT Kharagpur, with the support of local members from Gopali. It was established in 2002 with a mission to improve the living standard of the people of Gopali, a village 5 km from IIT Kharagpur. Registered in 2004 under the West Bengal Societies Registration Act of 1961 with Reg. No. S/IL/23893, it has been advancing with the twin objectives of making the youth and society aware of and ensuring socio-economic welfare for underprivileged and weaker sections of the society. Through its programmes of free education, social awareness campaigns and vocational training, GYWS has seen many lives changed for the better.

Other IIT Collaborations

Two IIT Institute level collaborations was made fundamentally established in the form of joint paper writing, applying joint projects, and conducting workshops.

At Rural Technology Action Group (RuTAG), IIT Delhi successfully conducted the Management Development Program on Rural Entrepreneurship from 2nd-4th October, 2019. The inauguration session was graced by Dr. Ketaki Bapat, Scientist F, Principal Scientific Advisor

to the Government of India; Prof.S.K.Saha, Co-Ordinator and Principal Investigator and RuTAG, IIT Delhi; Mr. Varun Vidyarthi, Director, Manovodaya, Lucknow. Were present while this program centered around the question as to how one goes from a technological solution developed to solve a local rural problem to a full-fledged enterprise that manufactures, markets and distributes a product to make a sustainable outcome.

At Rural Technology Development Center, IIT Guwahati, conducted a seminar introducing the scope of Innovation and Entrepreneurship during campus life. A special discussion commenced with the importance and requirement of community level projects for more impact of Technology transfer to the common people with the guidance from Prof. Sashindra Kakoty, Senior Professor Mechanical Department and Professor In-Charge for CRTD at IIT Guwahati.. A joint project was written at TDUPW scheme (DSIR) for engaging the local women group and NGO for sustainable livelihood through technology transfer and interaction. The project values INR 37.50 Lakhs and for duration of two years.

International Collaborations

Worked with Prof. Sanjay Mishra, University of Kansas, USA- on Working Paper for Entrepreneurship

Worked with Prof. Farrokh Mistree, University of Oklahoma, USA- on a workshop on Sustainable Leadership

Worked with Prof. Paul Lillrank, Aalto University, Finland- on Working paper on Health Care Delivery Model

Worked with Prof. Kevin Finn, Curtin University, Australia- on Developing an International platform on Entrepreneurship Mentoring (<http://www.ob1pad1.com/team/>)

Society Member:

Strategic management Society (www.strategicmanagement.net)

Academy of Management (www.aom.org)

Editorial Activities:

Member, Sectional Committee, GIAN (MHRD)

Reviewer, Strategic Entrepreneurship Journal (Wiley)

Member, Review Board: Amity Journal of Entrepreneurship (AMITY UNIV)

Member, Editorial Advisory Board: Research Insights (IGI)

Member, Editorial Board: Retail and Marketing Review (UNISA)

Reviewer, Pan IIM Conferences, 2017.

Reviewer Academy of Strategic Management Journal (2019)

Reviewer Journal of Indian Business Research (Emerald) (2019)

Reviewer, E-Entrepreneurship and Innovation (IGI Global)

Article Editor for Sage Open Journal (Sage)

Member, Editor Advisory Board on Competitive Strategies for Academic Entrepreneurship: Commercialization of Research-Based Products.

Member of Advisory Board and Review Committee of the International Strategic Management Conference.

Reviewer Technology Analysis & Strategic Management (Taylor & Francis)

Reviewer, Journal of Asia business Studies (Emerald)

Reviewer, Journal of Cleaner Production (Elsevier)

References:

- Prof. M R Dixit. Indian Institute of Management, Ahmedabad. Vastrapur, Ahmedabad 380015. Phone: +91-79-66324808; Email: dixit@iimahd.ernet.in
- Prof. N Venkiteswaran. Indian Institute of Management, Ahmedabad. Vastrapur, Ahmedabad 380015. Phone: +91-79-66324873; Email: venkites@iimahd.ernet.in
- Prof. P Khokle. Indian Institute of Management, Ahmedabad. Vastrapur, Ahmedabad 380015. Phone: +91-79-66324919; Email: khokle@iimahd.ernet.in
- Mr. D. J. Yadav. CEO, Arvind Accel Limited. Naroda Roda Ahmedabad. 380015 Phone: +91-79-22208000; Email: dinesh.yadav@arvind.in
- Mr. Bimalendra Jha. Vice President (Long Products), Tata Steel Limited. Jamshedpur. Jharkhand. Phone: +91-657-2431152; Email: bjha@tatasteel.com
- Ashoke Maitra. President (Operations). Syntex Industries Limited. Textile Division. Kalol. 382721. Phone: +91-2764-253000; Email: bvm@syntex.co.in
- Prof. Jhareswar Maity. ISE, IIT Kharagpur. Phone +91-9474305050 Email: jmaity@iem.iitkgp.ac.in
- Prof. Deepak Kumar Maiti. Aerospace, IIT Kharagpur. Phone +91-9933030201 Email: dkmaiti@aero.iitkgp.ac.in