

Profile

Name

Dr. Sanjay Bhardwaj



Designation

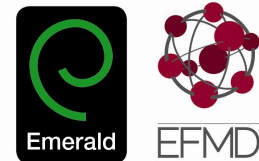
Scientist "F" and Team Leader

Qualification

Ph.D. obtained at : Indian Institute of Technology Bombay (IITB),
Mumbai

*Doctoral thesis title : "Developing a Commercialization Model for the
Advanced Materials Technology Sector in the
Indian Context"*

*Highly Commended Winner in the 2015 Emerald/European Foundation
for Management Development (EFMD) Outstanding Doctoral Research
Awards*



Emerald/EFMD Outstanding
Doctoral Research Awards

**Highly Commended
Award 2015**

Experience

- Over 20 years experience in different facets associated with engineering and technology management. Typical areas include Marketing of Technologies and Technology-based-Products, Performing Techno-commercial Feasibility Analysis, Preparing Agreements to Forge Alliances for collaborations and technology transfers, Conducting Patent/Competition Analysis, Valuation of Technologies and Technology-based-products, Application Development, Production Planning, Process Engineering
- Guidance to postgraduate students for their internship projects
- Has been involved in forging collaborations / technology transfers for ARCI's materials-based-technologies with more than 50 organizations, including start-ups/ established companies
- Took initiatives, which culminated in signing of the first international Technology Transfer Agreement of ARCI with a Singapore-based company

Research Areas of Interest

Strategic Technological Alliances, Technology Commercialization Process, Technology Marketing and Transfer, Science & Technology-based Entrepreneurship, Technology Foresight, Patent Analysis and Intellectual Property (IP) Management

Papers in Journals and Conference Proceedings/Short Articles

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- *Following two papers discuss useful concepts for (i) assessing intellectual property / R & D / technology readiness, and (ii) linking R & D capability with appropriate collaborative models to enhance the impact of intellectual capital available with organizations. Insights provided are especially relevant for organizations working in advanced materials domain:*

(1) Bhardwaj, S., Padmanabham, G., Jain, K., Momaya, K.S. and Joshi, S.V. (2015) 'Strategic alliances for advanced materials' intellectual property value chain: research and technology organisation's perspective', *International Journal of Intellectual Property Management*, Vol. 8, Nos. 3/4, pp.207–226.

Abstract: Intellectual property value chains (IPVCs) comprise exploratory studies, laboratory demonstration, field tests, transfer and/or commercialization of technologies. Strategic technological alliances (STAs) between different organisations aim at strengthening the IPVCs. This phenomenon has influenced research and technology organisations (RTOs) due to their important role in the IPVCs. Characteristics of technology area, e.g., advanced materials technology (AMT) for this paper, play a crucial role for such alliances. An RTO shall be responsible for arranging complementary assets during exploratory studies, laboratory demonstration and field test stages, while commercialising entity shall be responsible for assembly of complementary assets for competitive manufacturing and marketing. In this paper, an attempt has been made to develop two-step process including: 1) assessment of the level of technology development using intellectual property development indices (IPDIs) for advanced materials technologies; 2) proposing a matrix to assist RTOs in identifying the useful partners from industry, academia and R&D.

Keywords: strategic alliances; innovations; research and technology organisations; RTOs; R&D; advanced materials; intellectual property development indices; IPDIs; cooperative strategies.

(2) Bhardwaj, S., Padmanabham, G., Jain, K. and Joshi, S.V. (2015) 'Innovation paradigms: contractual models for research and technology organisations', *International Journal of Technology Transfer and Commercialisation*, Vol. 13, Nos. 3/4, pp.133–153.

Abstract: Co-development partnerships are increasingly being used to enhance innovation effectiveness and leverage complementary capabilities of partner organisations. A perceptible

transition from closed innovation paradigm to open innovation paradigm is also observed. This trend is consistent with the thinking that capabilities necessary for creating innovations are often not completely available within a single organisation. Furthermore, the intellectual property (IP) regime is getting stronger by the day. These changes in the macro-environment coupled with the need to access complementary capabilities have spurred the need for novel contractual models, which facilitate transactions involving IP and other assets between different organisations. In this backdrop, the authors have attempted to analyse the trend of contractual models that have either already been adopted or are in the process of adoption by an Indian research and technology organisation (RTO) involved in the development, demonstration and transfer of materials-based technologies. This paper specifically addresses issues associated with partnerships that attempt to embrace open innovation paradigm in the face of progressively strengthening IP regimes, and their implications on contractual models suited to an RTO, with illustrative examples.

Keywords: innovation paradigm; intellectual property; open innovation; contractual models; research and technology organisations; RTOs; research and development; R&D; technology development; technology transfer; technology commercialisation; innovation; research.

Lectures/Presentations

Delivered more than 110 Invited lectures/presentations during Faculty Development Programmes, Technology-based Entrepreneurship Development Programmes, Management Development Programmes, National/International Conferences, Seminars, Symposiums etc. on themes like R & D planning, IP competitive intelligence, strategic technology alliances, technology assessment, patent analysis, new product development, contractual interaction models, new enterprise creation, product launch and growth strategies, strategic technology planning, open innovation, technology transfer and commercialization, IPR management, technology scouting and technology adoption cycle

Awards , Honours and Recognitions

- Doctoral research work chosen as Highly Commended Award Winner by International Journal of Operations & Production Management (IJOPM) under the category of Operations and Production Management in the 2015 Emerald/EFMD Outstanding Doctoral Research Awards. Emerald Group Publishing Limited, UK and European Foundation for Management Development (EFMD) support the award. IJOPM is one of the leading journals in the world in the field of Operations Management. (Details are available at : www.emeraldgrouppublishing.com/research/awards/odra.htm)
- 1st prize in 'Quiz on Intellectual Property' conducted during 'Workshop on Managing Innovation & Intellectual Property' at the 3rd International Conference on Management of Intellectual Property and Strategy (MIPS) 2016 at Mumbai during July 2016

- Honorary Joint Secretary, Indian Institute of Chemical Engineers - Hyderabad Regional Centre (IChE-HRC) and Co-Chairman of Industrial Visit Committee, IChE- HRC for the year 2016-17
- Appreciation Certificates/Letters from All India Manufacturers Association (AIMO) – AP Chapter, Federation of Andhra Pradesh Small Industries Associations (FAPSIA) and Andhra Pradesh State Financial Corporation (APSFC) for initiatives in the field of technology-based entrepreneurship
- "Best Stall Award" for efforts in promotion of materials technologies for entrepreneurship, while independently managing ARCI stall at Exhibition entitled "INDUS EXPO 2003" organized by National Small Industries Corporation (NSIC) and M/s Bowstring at Hyderabad (November 2003)
- Appreciation Letter from E.I. Dupont India Limited, New Delhi for successfully developing new customers for polymer materials like Nylon-6 and polyacetal resins during MBA Professional Training (June – August 1997)
- Institute-cum-Merit Scholarship and Marshall Charitable Foundation Bombay's Scholarship during B.Tech. at Harcourt Butler Technological Institute (HBTI) Kanpur {now Harcourt Butler Technical University (HBTU) Kanpur}
- Invited to be Advisory Board member for Incubation Centre/Entrepreneurship Development Cell of a Hyderabad-based Engineering College and a Warangal-based Business School

Membership of Professional Societies

- Life member - Indian Institute of Chemical Engineers
- Life member - Materials Research Society of India
- Life member - Global Institute of Flexible Systems Management
- Fellow - Society for Technology Management

Contact information

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