

Dhanada K. Mishra, Ph. D.

Technology Management • Leadership • Communication

Career Overview & Capabilities

Outstanding technology management abilities based on excellent academic background in advanced civil engineering materials and proven track record in product development process

- *Successful management of Product development program of a overseas company in a strong leadership role focusing on product development and project management processes*
- *Extensive experience in specialised technical consulting in civil engineering structures and materials fields*
- *Outstanding academic career with excellence in and out of the lecture hall*

Key Achievements

Process side of Technology Management

- Led the development of the R&D program at KIIT (Deemed University) from scratch building it up to a small, but meaningful program under challenging academic conditions.
- Played a key role in establishment of a Product Development Process Model to accelerate the success rate in technology commercialisation at Rocla Technology, Australia
 - Actively participated in the workgroup in a leadership role to develop the process model and the technology commercialisation roadmap
 - Strongly supported the adoption and implementation of the Process Model
 - Played a key role in communicating the benefits of the process driven approach to peers, senior management and direct reports
- Actively participated in the development of a 'Laboratory Information Management System' (LIMS)
 - Help generate the specifications for the development group via a business process mapping exercise
 - Actively participated in the development and implementation of the in-house LIMS
 - Facilitated the extension of the capabilities to enhance capture of intellectual property, technical data integrity, OHS system implementation, maintenance and safe use of equipment, project scheduling, resourcing, management and product delivery
- Implementation of the Balanced Scorecard framework

- Developed a framework for performance measurement through balanced scorecard
- Facilitated the development of the Balanced Scorecard Framework via a consultative team approach and participation of a workgroup

Technology development and delivery

- Innovative Experimental Technology
 - Helped develop the in-house capabilities in strain gauging technology
 - Helped develop the in-house capabilities in displacement controlled testing, non-destructive testing and data capture
 - Played a key role in specifying, negotiating and purchase of a high end Non-destructive testing equipment and universal testing machine
- Innovative Analytical Technology
 - Helped develop in-house capabilities in the area of Finite Element Analysis
 - Helped develop capabilities in the area of Dynamic structural analysis
 - Helped develop capabilities in the area of micromechanics based design of Engineered Cement composites
- Training, Networking and Peer Network Development
 - Helped develop a network of local and international academics and industrial researchers to extend in-house technology capabilities
 - Helped train in-house personnel and better network with internal clients
 - Helped develop peers through technical and inter-personnel assistance

Career Progression

January 2005- Present

Principal

Jagannath Institute for Technology and Management (<http://www.jitm.org/>)

Key Responsibilities – Overall academic and administrative leadership of the organisation.

April 2003- December 2004

Dean – Research and Industrial Coordination

Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar 751024 (<http://www.kiit.org/>)

Key Responsibilities – To initiate, coordinate and manage research, consulting, testing and training activities at the institute.

Key Achievements – Formulation of R&D guidelines and a five year R&D strategic plan for KIIT (Deemed University), Generation of revenue worth 25 lakhs generated from various sources such as research, consultancy, testing and conference/workshop related activities, involvement in a key leadership position in conduct of two major conferences and a number of other academic events, coordinator of the Industry-institute partnership cell.

April 2001- 2003

Site Manager and Development Manager - Rocla Technology, Guildford

Rocla Industries Limited Group (<http://www.rocla.com.au/>), Australia

Key responsibilities – Management of concrete testing, research, product development and technology commercialisation; Management of a group of up to ten engineers, scientists,

technical officers and assistants as direct reports; Independent responsibility for an annual budget of A\$ 1.5 million; Responsibility for site OHSE system and overall administration, Responsibility for communication with key clients and their satisfaction.

Dec. 1999 - Mar 2001

Manager - Development Section, Rocla Technology

Key responsibilities – Management of the technical aspect of product development projects for sponsoring business units; Participation in product development project teams, leadership in generation of new ideas in the pre-Product Concept development stage; Independent responsibility for the development section comprising of about 5 engineers and scientists and a budget of A\$1.0 million.

Mar. 1998 - Nov. 1999

Development Engineer, Rocla Technology

Key responsibilities – Generate new ideas in the pre-concept development stage, Serve project teams and conduct product concept development and concept proofing, design and test product prototypes; Participate in the product development project team to assist in pilot production and (commercial) production transition, develop new technology and in-house capabilities, network with internal and external technical members and academics; Assist with technical training and peer development.

Oct. 1997 - Jan. 1998 (On leave from Associated Cement Companies Ltd., India)

Visiting Research Fellow

Department of Civil and Environmental Engineering

University of Michigan, Ann Arbor, MI, USA (<http://www.umich.edu/>)

Key responsibilities – Independently carry out research in to new areas of Engineered Cementitious Composites behaviour; Plan and implement experimental program; Assess results; Prepare reports, technical papers and presentations.

Oct. 1995 - Feb 1998

Deputy manager

Concrete Consultancy Services Division

Research and Consultancy Directorate, Thane (<http://www.acclimited.com/rcd.html>)

Associated Cement companies Ltd., Mumbai, India (<http://www.acclimited.com/>)

Key responsibilities – Carry out Non-destructive testing of concrete and reinforced concrete structures including condition survey, impact hammer testing, concrete core sampling and testing, in-situ corrosion measurement, manage up to 3 engineers, technical officers as direct reports; Assist in providing technical advice on materials aspects and management of Architectural conservation projects.

Sept. 1991 - April 1995

Research Assistant

Advanced Civil Engineering Materials Research Laboratory

School of Civil and Environmental Engineering

University of Michigan, Ann Arbor, MI, USA

Key responsibilities – Carry out supervised research in to new areas of Engineered Cementitious Composites behaviour; Plan and implement doctoral research program; Carry out experimental and analytical research; Prepare reports, technical papers and presentations.

Sept. 1989 - April 1991

Graduate Student Assistant (Research and Teaching)
Department of Civil Engineering and Environmental Sciences
University of Oklahoma, Norman, OK, USA

Key responsibilities – Carry out research in to structural behaviour of concrete; assist with teaching of post-graduate courses in civil, structural and materials engineering.

Education

Sept. 1991 - April 1995

University of Michigan, Ann Arbor, Michigan

Doctor of Philosophy (Civil Engineering Materials), **GPA** - 8.1/9.0

Doctoral Dissertation - Design of Pseudo Strain-hardening Cementitious Composite for a Ductile Plastic Hinge

Sept. 1989 - April 1991

University of Oklahoma, Norman, Oklahoma

Masters of Science (Structural Engineering), **GPA** - 3.79/4.00

Masters Thesis - A High capacity Cubical Device - Development and Performance Evaluation

Sept. 1985 - April 1989

Regional Engineering College, Trichy, Tamil Nadu

Bachelor of Engineering (Civil), **Rank** - I Class (81.9%)

Final Year Project - Design, Fabrication and Erection of a tower Type Boiler Structure

List of Publications

Papers in refereed journal (published)

V. C. Li, D. K. Mishra, A. E. Naaman, J. K. Wight, J. M. Lafave, H. C. Wu, and Y. Inada, "On the shear behavior of ECC", Journal of Advanced Cement based Materials, Vol. 1, pp. 142-149, 1993.

V. C. Li, D. K. Mishra and H. C. Wu, "Matrix Design for Pseudo Strain-hardening Cementitious Composites", RILEM Journal of Materials and Structures, 28, pp. 586-595, 1995

V. C. Li, H. C. Wu, M. Maalej, D. K. Mishra and T. Hashida, "Tensile Behavior of Cement based Composites with Random Discontinuous Steel Fiber", Journal of American Ceramic Society, Vol. 79, No. 1, pp. 74-78, 1996.

V. C. Li and D. K. Mishra, "Structural Applications of engineered Cementitious Composites", Indian Concrete Journal, Vol. 70, No. 10, pp. 561-567, 1996.

D. K. Mishra and B. V. B. Pai, "Compressive Strength Variation in a Large Inclined RC Beam by Non-Destructive Testing, Submitted for publication in the Indian Concrete Journal, 2003.

Papers in conference proceedings

D. K. Mishra and L. Provo, "Binobajipuram House - A New Direction in Low Cost Housing", Proceedings of the World Housing Congress, Bangalore, India, 1989.

A. R. Kukreti, M. M. Zaman and D. K. Mishra, "A High capacity Cubical Device" Proceedings of the International Plasticity Conference, Paris, France, pp. 221-224, 1991.

V. C. Li and D. K. Mishra, "Micromechanics of Fiber Effect on the Uniaxial Compressive Strength of Cementitious composites", Proceedings of the Fourth RILEM International Symposium, Sheffield, England, pp. 400-414, 1992.

H. C. Wu, D. K. Mishra and V. C. Li, "Influence of Matrix Fracture Toughness on Tensile Behavior of Fiber Reinforced Cementitious Composites", Proceedings of the 3rd Beijing International Symposium on Cement and Concrete, China, pp. 222-231, 1993.

D. K. Mishra, K. Beattie, R. Lewtas, "Partial Replacement Sleepers for Enhanced Long Term Value of Rail Track Infrastructure", Proceedings of the 13th RTAA International Conference, Nov 11-14th 2001, Canberra, Australia.

D. K. Mishra, "Pressed Inter-locking Blocks for Housing – a Critical Review", International Conference on Emerging Technologies (ICET), KIIT, Bhubaneswar, Dec 2003.

P. Bakos and D. K. Mishra, "Community Based Disaster Mitigation", International Conference on Emerging Technologies (ICET), KIIT, Bhubaneswar, Dec 2003.

D. K. Mishra, "Flyash Based Geopolymeric Materials – A review of the State-of-the-Art", 2nd International Conference on Emerging Technology (ICET 2004), to be published by Allied Publisher, New Delhi.

D. K. Mishra, "The Hands-on Approach as the Essence of Quality in Technical Education" National Seminar on Technical Manpower Development and Utilisation at NIT, Rourkela on 15th April 2004

Technical Reports

V. C. Li, D. K. Mishra and H. C. Wu, "Performance of ECC Material in Ohno Shear Beams", UMCEE Report No. 92-33, Submitted to the Shimizu corporation, Japan, 57 pp, 1993.

D. K. Mishra, Y. M. Lim and V. C. Li, "Design and Structural Application of ECC" UMCEE Report No. 94-14, Final report submitted to the Shimizu corporation, Japan, 43 pp, 1994.

Over 10 confidential consultancy reports at Research and Consultancy Directorate of ACC, India.

Over 10 confidential product development reports at Rocla Technology, Australia.

Other

N. Sahoo and D. K. Mishra, “A Study on the Development of Compressive Strength in Concrete with Nalco Flyash”, Under preparation to be submitted to Indian Concrete Journal.

Awards

National Merit Scholarship	Govt. of Orissa, India	1978-83
National Talent Search Scholarship	NCERT, Govt. of India	1983-89
Chi-Epsilon	Univ. of Oklahoma	1991-92

Training

2002 - Knowledge Management (Standards Australia)
 2002 - Workplace Relations – Hiring & Firing (Department of Work Place Relations)
 2002 - Worker's Compensation (Australian Worker's Union)
 2001 - Managing People's Performance (Team Management Systems)
 2001 - Data Acquisition for Engineers (MSC Software)
 2001 - Introduction to MSC.Marc - Finite Element Analysis (Compumod)
 2000 - How to become a better communicator (MTE)
 1999 - Mastering Advanced Features of Access 97 (MTE)
 1998 - People side of Project Management (Abbott Training)
 1998 - Problem Solving and Decision Making (Kepner Tregoe)
 1998 - Senior First Aid Certificate Course (St Johns Ambulance)
 1997 - Taguchi Method of Qual-cost Optimisation (ACC)
 1996 – Introduction to ISO 9000 (TMT – RCD)

Conferences

2005 – National Workshop on Building Technologies and Maintainance, Brahmapur, Orissa
 2004 - 2nd International Conference on Emerging Technologies, Bhubaneswar, India
 2003 – 1st International Conference on Emerging Technologies, Bhubaneswar, India.
 2003 – First International Symposium on Ductile Fiber Reinforced Cement Composites (DFRCC) Takayama, Japan.
 2001 - Rail Track Association of Australia - 13th International Conference, Canberra, Australia
 1999 - ACBM Semi-annual meeting, NIST, Gaithersburg, Washington D. C., US
 1999 - Delivered lectures on 'Flyash and its application' and 'the Innovation Process Model' at the Institution of Engineers, Bhubaneswar, India
 1999 - Harold Roper Workshop in Concrete Technology - University of Sydney
 1995 - 10th World Conference on Earthquake Engineering, Chicago
 1992 - 4th RILEM International Symposium on Fibre Reinforced Concrete
 1989 - World Housing Congress, Bangalore, India

References

Prof. Victor C. Li
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Ann Arbor MI 48109
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Email - vcli@engin.umich.edu
<http://www.engineeredcomposites.com/>

Mr. Chris Busck
Manager (former), Rocla Technology
Principal, Busck Consult Pvt. Ltd.
40 Lyndon Ave., Beecroft
NSW, Australia
Ph. 2 9441 2917
Email - busck@connect.net.au

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Deemed University
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www.kiit.org

Personal

Date of Birth - 08th July 1967

Citizenship - Indian, **Permanent Resident of Australia**

Languages - English, Hindi, Oriya and Bengali

Sports

Represented Holroyd district cricket club in Sydney Shires Competition in 1997-98 and Indo-Australia cricket club in 1999-00 and 2000-01. Represented college and university cricket teams in India and US.

Non-profits

Member - Board of Directors
Sustainable Educational and Economic Development Society - SEEDS
(www.seedsnet.org)

Founder – President
Association for India's Development Australia Inc. AID (www.aidindia.org/sydney)
Coordinator – Orissa Chapter

Member – National Executive and Coordinator – Orissa State Chapter
Society for Promotion of Indian Classical Music & Culture amongst Youth (SPIC
MACAY)