

Dr. RAKESH BABU

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CAREER HIGHLIGHTS

- Lead Accessibility Scientist, Envision Research Institute;
- 7 years professorial experience at R1 University;
- 2 years experience as Principal Research Scientist at Norwegian Research Organization;
- 2 years experience serving in Board of Directors of Major NIB Affiliate;
- Ph.D and MS in Information Systems from AACSB-Accredited Institutions;
- 12 years experience teaching Information Systems and Human Factors at undergraduate & graduate levels;
- University teaching experience in Database Management, Programming, Human-Computer Interaction, Information/ Cyber Security, Systems Analysis & Design;
- 13 peer-reviewed journal articles and 26 refereed conference proceedings papers;
- Research expertise in IT accessibility/ usability and IT-enabled workplace inclusion;
- Recipient of 8 research grant awards;
- Recipient of 2 teaching excellence awards;
- 8 years experience in student advising and mentoring;
- Professional service across 12 governance committees and 8 journal review panels;
- 5 Years experience organizing mini-track on IT accessibility and people with different abilities at premier academic conference.

INTELLECTUAL CONTRIBUTIONS

Refereed Journal Publications

Xie, I., Babu, R., Castillo, M.D., and Han, H. (2017). Identification of factors associated with blind users' help-seeking situations in interacting with digital libraries. *Journal of the Association for Information Science and Technology*. doi:10.1002/asi.23982.

Heath, D. and Babu, R. (2017). Theorizing managerial perceptions, enabling IT, and the social inclusion of workers with disabilities. *Information and Organization*. 27(4), 211-225. DOI: 10.1016/j.infoandorg.2017.09.001.

Babu, R. and Xie, I. (2017). Haze in the Digital Library: Design Issues Hampering Accessibility for Blind Users. *The Electronic Library*, 35(5). <https://doi.org/10.1108/EL-10-2016-0209>.

Babu, R. and Heath, D. (2017). Mobile Assistive Technology and Job Fit of Blind Workers. *Journal of Information, Communications and Ethics in Society (JICES)*, 15(2). doi: 10.1108/JICES-10-2016-0041. Available online at <http://www.emeraldinsight.com/doi/pdfplus/10.1108/JICES-10-2016-0041>

Babu, R. (2015). Blind Students' Challenges in Social Media Communication: An Early Investigation of Facebook Usability for Informal Learning. *International Journal of Online Pedagogy and Course Design (IJOPCD)*, 5(1), 58-73. doi:10.4018/ijopcd.2015010105.

Babu, R. and Fuller, P. (2015). Towards more helpful bus tracker apps for blind transit riders. *First Monday*, 20(6), doi:10.5210/fm.v20i6.5536.

Xie, I., Babu, R., Joo, S., & Fuller, P. (2015). Using Digital Libraries Non-Visually: Understanding Help-Seeking Situations of Blind Users. *Information Research*, 20(2), paper 673. Available at <http://InformationR.net/ir/20-2/paper673.html>.

Babu, R. (2014). Can blind people use social media effectively? A qualitative field study of Facebook usability. *American Journal of Information Systems*, 2(2), pp. 33-41. Available at <http://www.sciepub.com/ajis/content/2/2>

Babu, R. (2013). Understanding challenges in non-visual interaction with travel sites: An exploratory field study with blind users. *First Monday*, 18(12). Available at <http://firstmonday.org/ojs/index.php/fm/article/view/4808>

Babu, R. and Singh, R. (2013). Enhancing learning management systems utility for blind students: A task-oriented, user-centered, multimethod evaluation technique. *Journal of Information Technology and Education-Research*, 12. Available at <http://www.jite.org/documents/Vol12/JITEv12ResearchBabu001-032.pdf>.

Babu, R. (2012). Developing more accurate competence models for improved e-learning for the blind. *Journal of Information Science & Technology*, 9(2). Available at <http://pascal.iseg.utl.pt/ojs/index.php/jist/article/view/139>.

Babu, R., Singh, R., and Ganesh, J. (2010). Understanding blind users' Web accessibility and usability problems. *AIS Transactions on Human Computer Interaction*, 2(3), 73-94.

Babu, R. and Midha, V. (2007). Accessible E-learning: Equal pedagogical opportunities for students with sensory limitations. *International Journal of Web-Based Learning and Teaching Technologies*, 2(2), 38-49.

Refereed Conference Papers

Xie, I., Babu, R., Castillo, M., Lee, TH., You, S. & Hanlon, A. (2017). Designing Help Features to Support Blind Users' Interaction with Digital Libraries. 2017 Annual Conference of the Association of Library & Information Science Educators (ALISE), January 17 – 20, Atlanta, GA.

Heath, D.H., Babu, R., Singh, R., and Sahasrabudhe, S. (2015). Changing Employer Cognition: Personal Mobile Technology as a Workplace Enabler for Blind and Visually Impaired Workers. Proceedings of the Thirty-Sixth International Conference on Information Systems (ICIS) 2015, Dec 13-16, Fort Worth, TX, U.S.A

Xie, I., Babu, R., Joo, S., & Fuller, P. (2014). Universal Access to Digital Libraries: Understanding Accessibility Problems of Blind Users. Annual International Conference on Library and Information Science, Athens, Greece, August, 2014.

Xie, I., Babu, R., Jeong, W., Joo, S. & Fuller, P. (2014). Blind users searching digital libraries: Help-seeking situations at the cognitive level. Proceedings of the Ninth Annual Conference, pp. 853–857. doi:10.9776/14272

Singh, R., Heath, D.H., Sahasrabudhe, S., and Babu, R. (2013). BlindVine: Improving design from unique ICT affordances to address societal challenges. Paper presented at the Twelfth Pre-ICIS (International Conference on Information Systems) Workshop 2013, Dec 15-18, Milan, Italy.

Babu, R., and Singh, R. (2013). Accessibility and usability of social media: Convergence between blind users and design standards. Proceedings of the Nineteenth Americas Conference on Information Systems (AMCIS'13). Aug 15th-19th, Chicago, USA.

Babu, R. (2013). Accessibility and Usability of Consumer Health IT: Bridging the Chasm between Developers and Blind Users. Paper Presented at the First International Conference on Computation & Communication Advancement, January 11-13, Kolkata, India.

Babu, R. (2012). Evaluating E-library Accessibility and Usability for Blind Users. Proceedings of the Nineteenth International Conference on Learning. August 12 – 14, London, UK.

Babu, R. and Singh, R. (2012). Empowering blind patients in the information society: An innovative multimethod approach to evaluate accessibility and usability of patient portals. Proceedings of the Eleventh ISOneWorld Conference, Las Vegas, NV.

Pal, J., Pradhan, M., Shah, M., & Babu, R. (2011). Assistive technology for vision-impairments: an agenda for the ICTD community. In Proceedings of the 20th international conference companion on World Wide Web (pp. 513-522). ACM.

Babu, R. and Singh, R. (2010). Beyond Accessibility: A Cognitive Approach to Usability of Information & Communications Technology for the Visually Impaired. 6th Nordic Conference on Human-Computer Interaction, August 6th-8th, Stavanger, Norway.

Babu, R. (2010). Understanding Accessibility and Usability Problems Blind Users Face in Web Interactions. 12th International Conference on Computers Helping People with Special Needs, July 14th-16th, Vienna, Austria.

Babu, R., Singh, R., Ganesh, J. Thorvaldsen, K. and Fuglerud, K. S. (2010). Accessibility and Usability Problems in Web-Enhanced Instruction: Experience of Blind Students in Taking Online Assessment. 25th International Technology & Persons with Disabilities Conference, March 24th-27th, San Diego, CA, USA.

Babu, R., Singh, R., Ganesh, J. and Kolhatkar, A. (2010). Evaluating Web Accessibility & Usability for Non-Visual Interaction: A Cognitive Multi-method Approach. 9th ISOneWorld Conference, April 8th-9th, Las Vegas, NV, USA.

Babu R. and Singh, R. (2010). Improving Web Accessibility and Usability in Non-Visual Interaction: Learning from Visually Impaired Users' Web Interactions. 9th ISOneWorld Conference, April 8th-9th, Las Vegas, NV, USA.

Babu, R., Singh, R., Ganesh, J. and Padmanabhuni, S. (2009). Web Usability & Accessibility: Industry-Academia Research Collaboration. 1st Infosys' Technology Conference & Showcase (Aurora'09). October 19th-20th, Los Angeles, USA.

Babu, R. (2009). Developing an understanding of the nature of accessibility and usability problems blind students face in Web-enhanced instruction environment. Proceedings of Fifteenth Americas Conference on Information Systems (AMCIS'09). Aug 5th-9th, San Francisco, CA.

Babu, R., and Singh, R. (2009). Understanding blind users' accessibility and usability problems in an online task. Proceedings of the Fifteenth Americas Conference on Information Systems (AMCIS'09). Aug 5th-9th, San Francisco, CA. USA.

Babu, R., and Singh, R. (2009). Evaluation of Web accessibility and usability from blind users' perspective: The context of online assessment. Proceedings of Fifteenth Americas Conference on Information Systems (AMCIS'09). Aug 5th-9th, San Francisco, CA.

Babu, R. (2008). Improving the effectiveness of technology-mediated learning for visually impaired students: Proposing an interpretive field investigation. Eleventh Annual Conference of the Southern Association of Information Systems, March 13th-15th, Richmond, VA.

Babu, R. (2008). Developing a conceptual model for continued use of e-learning environments. Eleventh Annual Conference of the Southern Association of Information Systems, March 13-15, Richmond, VA, USA.

Babu, R., Singh, R., Iyer, L. S., & Midha, V. (2007). Differences in Factors Affecting Academic Success for Disabled Individuals in Technology-Mediated Learning Environments. Americas Conference on Information Systems (AMCIS), August 9- 12, Key Stone, CO.

Babu R. and Palvia, P.C. (2007). E-learning accessibility and usability: An Empirical Examination of Differently-Abled Students' Perspective on Course Management Systems. Proceedings of the Sixth Annual GITMA Conference, July 15th-19th, Napoli, Italy.

Baqir, M. N. Babu, R. and Palvia, P. C. (2007). Information & communications technology as a driver for socio-economic development in third world countries. A case study. Thirty-eighth Annual Meeting of the Decision Sciences Institute, November 17-20, Phoenix, AR.

Babu, R. Baqir, M. N. and Palvia, P. C. (2006). A meta-analysis of geographical information systems research in business. Proceedings of the Fifth Annual GITMA Conference, June 11th-14th, Orlando, FL, USA.

Babu, R. and Midha, V. (2006). Accessible and usable E-learning: Equal pedagogical opportunities for students with disabilities. Ninth Annual Conference of the Southern Association of Information Systems, March 9 – 12, Jacksonville, FL.

Research Grants Received

- Creating Digital Library Design Guidelines on Accessibility, Usability & Utility for Blind & Visually Impaired Users: Jul'16 – Jun'19, Institute of Museum & Library Services National Leadership Grant (Co-PI) (\$500K).
- Universal Accessibility of Digital Libraries: Feb'16 – Jan'17, Online Computing Library Center ALISE Research Grant (Co-PI) (\$15K).
- Universal Accessibility of Digital Libraries: Jul'14 – Jun'15, RGI Award (Co-PI) (\$150K).
- Understanding Access and Usability Challenges Presented By Bus-tracking Sites for Blind Users: May'14 – Dec'14, SOIS SAGO Grant (PI) (\$2K).
- Creating Help Mechanisms for Blind Users: May'13 – Dec'13, SOIS SAGO Grant (PI) (\$2K).
- TREVIS: Triad Research Initiative to Empower the Visually Impaired in Information Systems Competitiveness: Jul'11 – Dec'12, TIPP Grant (Co-PI) (\$20K).
- Mind of the Blind on the Web: Aug'09 – May'12, U.S. National Science Foundation's CC, PAC and REESE programs (Co-PI) (\$100K).
- Include the Visually Impaired in the Social Web: Sep'10 – Mar'13. European Research Council's *Nordic-Baltic Research and Innovation Program on Living Labs* (Co-PI) (\$2M).
- Empowering the Visually Impaired in the Information Society: Jun'10 – Feb'11, *Research Council of Norway's IT-FUNK Program* (Co-PI) (\$10K).
- Research Collaboration to Improve Web Accessibility and Usability for the Blind (Pre-proposal Grant): May'10 – Sep'10. Research Council of Norway (Co-PI) (\$500).
- Beyond Web Accessibility-A Cognitive Approach to Usability for the Blind (Seminar Grant): Aug'10. Research Council of Norway (Co-PI) (\$3K).

Presentations

Panel Discussion: Web accessibility and Usability-Implications for People with Disabilities. Conference on Information Science & Technology Management. Jul'09.

Research Seminar: Mind of the Blind on the Web. Information Systems & Operations Management Department, UNCG. Sep'09.

Research Colloquium: Understanding Nature of Accessibility & Usability Problems Blind Users Face in Web Interactions. Computer Science Department, UNCG. Sep'10.

Research Seminar: Mind of the Blind on the Web: Experience of Using the Internet Without Sight. School of Business and Economics, North Carolina A&T University. Oct'10.

Research Seminar: Empowering the Visually Impaired in the Information Society. Office of the IT Funk Program, Research Council of Norway. Dec'10.

B2A Brown Bag Presentation: Accessibility and Usability of Healthcare Portals: Bridging the Chasm between Designers and Blind Users. School of Information Studies, University of Wisconsin-Milwaukee. Dec'11.

Panel Discussion: Dignified Living for People with Disabilities. Odisha Society of Americas Annual Convention. Jul'16.

Panel Discussion: Addressing Barriers to Engaging with Marginalized Communities: Advancing Research on Information, Communication, and Technologies for Development (ICTD). 2017 Annual Meeting of The Association for Information Science & Technology. Nov'17.

Undergraduate Courses Taught

- ISM 318: Database Management & SQL Programming.
- ISM 301: Systems Analysis & Design
- ISM 110: Introduction to MIS
- Infost 310: Human Factors in Information Seeking & Use
- Infost 410: Database Information Retrieval Systems

Graduate Courses Taught

- ISM 626: Information Security and Cybersecurity;
- ISM 620: Systems Analysis
- ISM 621: Systems Design and Software Engineering
- ISM 625: Information Assurance

Major Student Advising

- Mr. Steven Frets (2011). MLIS Student Research Project (UWM School of Information Studies).
- Ms. Rachel Bauman (2011-2012). Undergraduate Student Supervisory Committee (UWM College of Health Sciences).
- Ms. Janet Gayle Hamm (2012). MLIS Student (Information Studies, University of Wisconsin-Milwaukee).
- Mr. Brandon Cornejo (2012). BSIST student Internship (UWM School of Information Studies).
- Mr. Nathan Leigh Kluth (2012). BSIST student Internship. (UWM School of Information Studies).
- Dr. Partha Sarathi Bishnu (2012-2013). Doctoral Supervisory Committee (Birla Institute of Technology -Computer Science and Engineering Dept.).
- Dr. Vinay Singh (2015-2017). Doctoral Supervisory Committee (Birla Institute of Technology-Computer Science and Engineering Dept.).
- Ms. Melissa Castillo (2017-Current). Doctoral Dissertation Committee (University of Wisconsin-Milwaukee – School of Information Studies.).

PROFESSIONAL EXPERIENCE

Envision Inc.

Lead Accessibility Scientist, Envision Research Institute

Feb'18–Present

RESEARCH RESPONSIBILITIES

- Define and establish programs and best practices that promote upward mobility for BVI individuals.
- Translate research findings into training and education materials to benefit organizations seeking guidance on BVI accessibility, to be offered through Envision University's online learning platform.
- Evaluate and advise on evidence-based approaches to promote targeted and effective programs.
- Conduct independent research related to education, workplace, transportation and environmental accessibility.
- Observe and maintain certifications in research ethics, securing Institutional Review Board (IRB) approval before commencing human subject research.
- Apply for and secure grant and contract funding (federal, foundation, private and industry) to support research and programmatic activities.
- Supervise and train postdoctoral fellows, graduate students and undergraduate students in research activities.
- Disseminate research findings through scientific meetings including the Envision Conference, and publication in peer reviewed journals.
- Maintain and foster new industry and academic partners to promote collaboration and execution of accessibility-related projects.
- Participate in Envision Research Institute (ERI) activities to promote scientific discourse and collaboration (journal club, colloquium, etc).
- Advise leadership on research projects, development and areas of scientific interest to Envision. Communicate progress and results through written and oral presentation.
- Prepare communication materials for public release, including on Envision's website.
- Promote ERI by engaging in scientific community through board and planning committee participation, assisting in peer-review processes and guest speaking at appropriate institutions.
- Maintain a high degree of awareness of the current state of BVI accessibility by attending relevant conferences, workshops and reviewing key journals.

RESEARCH RESPONSIBILITIES

- Develop research programs to improve ICT accessibility and usability for users with vision impairment
- Forge research partnerships with universities, industry, R&D institutions and user communities
- Identify extramural funding sources for the research agenda
- Develop grant proposals for projects to pursue research agenda
- Manage research projects on Mobile assistive technology for blind workers; Information Science & Technology education for blind students; help mechanisms for blind-friendly digital libraries.
- Administer work packages; develop study protocols; supervise data collection/ analysis; and prepare project reports
- Plan research seminars and workshops to disseminate project outcomes
- Manage research projects through delegation and supervision of research assistants
- Editorial and review support, IDAIS Minitrack at AMCIS.
- Review support, America's Conference on Information Systems.
- Review support, Annual SOIS Student Conference 2012

TEACHING RESPONSIBILITIES

- Manage online and onsite sections of Infost 310 & 410 with approx. 35 students in each section.
- Develop lecture materials, quizzes, assignments, exams, hands-on exercises, and online discussion fora using the D2L learning environment.
- Assist students with programming issues using MS Access 2010 and MySQL.
- Assist students with Web design issues using Google Sites and WordPress.
- Assist students in planning, executing and reporting usability and accessibility tests.
- Assist IST interns in project management issues
- Grade assignments, quizzes, tutorials, projects and class participation.
- Addressed students' course-related questions/ concerns.
- Guide students in career choice and job applications.

SERVICE RESPONSIBILITIES

Contributed to school governance in following ways

- Aug'11-May'12. Undergraduate Programs Committee
- May'12-Jul'12. Lecturer Screening Committee
- Aug'12-May'13. Academic Hearing Committee
- Aug'12-May'13. Research Committee
- Nov'13-Dec'13. Lecturer Search Committee
- Aug'13-May'14. Undergraduate Programs Committee
- Apr'14-Jul'14. Lecturer Search & Screening Committee
- Aug'14-Oct'14. iSchool Dissertation Award Nomination Committee
- Aug'14-May'15. Research Committee
- Aug'15-May'17. ALA Accreditation Committee
- Aug'15-Current. Undergraduate Programs Committee
- Aug'15-May'17. Diversity & Equity Committee

Include-All Associates
Principal Research Scientist

Sep'09–Mar'11

RESEARCH RESPONSIBILITIES

- Develop research programs to improve ICT accessibility and usability for users with disabilities
- Forge research partnerships with universities, industry, R&D institutions and user organizations
- Identify funding instruments appropriate for Include-All's research agenda available through public and private funding agencies
- Develop grant proposals for projects to pursue research agenda
- Administer work packages; develop study protocols; supervise data collection/ analysis; and prepare project reports
- Plan research seminars and workshops to disseminate project outcomes

University of North Carolina, Greensboro
Graduate Assistant, Bryan School of Business & Economics

Aug'05-Jul'11

RESEARCH RESPONSIBILITIES

- Plan and develop grant proposals targeting National Science Foundation, Agency of Healthcare Research & Quality, Institute of Education Sciences, and North Carolina Triad Universities 2009 - 2011.
- Plan, execute and manage research activities for sponsored projects.
- Prepare project reports, conference presentations, and journal manuscripts.
- Editorial and review support, Conference on Information Science & Technology Management 2008, 2009, 2010.
- Editorial and review support, ISOneWorld Conference 2010
- Participation in multiple Information Systems research projects related to e-Learning accessibility for the disabled, Accessible e-commerce, e-governance, genetic algorithms and supply chain management.
- Review of relevant cross-disciplinary literature, create electronic repository for research articles, develop survey instruments and interview protocols, supervise pretest/ pilot tests, coordinate with organizational representatives to conduct studies and manage IRB application process.
- Perform quantitative data analysis using multiple statistical packages including SAS, SPSS and Lisrel.

TEACHING RESPONSIBILITIES

- Teach Database Design, SQL Programming, Information/ Cybersecurity, Systems Analysis & Design, and Introduction to MIS in the Bryan School of Business & Economics;
- Manage classes with approximately 25 students;
- Develop lecture material, assignments, hands-on lab exercises, projects and exams;
- Organize guest lectures on industry trends, internship opportunities, and IS career choices with IT professionals and executives;
- Assist students with issues related to programming environment and technical platforms.
- Created online course materials using Blackboard, WordPress and MyITLab
- Graded exams, lab exercises, projects, assignments and exams;
- Addressed students' course-related questions/ concerns;
- Developed, disseminated and collected teacher evaluation reports.

TEACHING RESPONSIBILITIES

- Taught Chemistry to Undergraduate Students
- Developed Quizzes and homework
- Assisted students with a variety of Chemistry related questions

RECOGNITIONS

- Teaching Award. UWM School of Information Studies. Jan'13, Sep'13, and Sep'14
- Wachovia Fellowship. UNCG Bryan School of Business & Economics. Aug'09
- Summer Research Grants. UNCG Graduate School. 2006, 2008 and 2009.
- Best Paper Award. Southern Association of Information Systems. Mar'06.
- Recipient of Jyotishree Samman 2014

MEDIA COVERAGE

- Mind of the Blind. UNCG Research Magazine. Feb'10.
<http://ure.uncg.edu/inspirechange/2010/05/mind-of-the-blind/>
- Hearing the Internet. UWM Research Report 2013. Feb'13. Available online at:
<http://www4.uwm.edu/research-impact/report/story.cfm?i=hearing>
- UWM Today: User Friendly Computers and Internet for the Blind. WUWM: Milwaukee Public Radio. Apr'12. Available online at:
<http://castroller.com/podcasts/WuwmUwmToday/2846101>
- Building a blind-friendly Internet. UWM News. Feb'12. Available online at:
<http://www5.uwm.edu/news/2012/02/10/building-a-%E2%80%98blind-friendly%E2%80%99-internet/>
- Building a blind-friendly Internet. Communications of the Association of Computing Machinery. Mar'12. Available online at: <http://cacm.acm.org/careers/146027-building-a-blind-friendly-internet/fulltext>
- [Helping the Blind Navigate the Online World. Newswise. Mar'12. Available online at http://www.newswise.com/articles/view/587177?print-article](http://www.newswise.com/articles/view/587177?print-article)
- Building a blind-friendly Internet. Assistive Technology Radio. Apr'12. Available online at: <http://www.eastersealstech.com/2012/03/30/atu044-resna-alex-mihailidis-run-windows-on-your-ipad-are-you-happy-with-siri-appwriter-brightstar-visionassist-cause-and-effect-apps/>
- Accessibility: Envisioning a Blind-Friendly Internet. On Teaching and Learning. Mar'12. Available online at: <http://onteachingandlearning.blogspot.com/2012/04/accessibility-envisioning-blind.html>
- A new Web experience, for the visually impaired". Mumbai Mirror. Feb'12. Available online at:
<http://www.mumbaimirror.com/index.aspx?page=article§id=7&contentid=201202152012021502583099755f5b24f>
- Dreamers and Doers: In Research. University of North Carolina at Greensboro Alumni Magazine. Available online at: http://ure.uncg.edu/magazine/2012_summer/dsba_research.htm

PROFESSIONAL SERVICE

Reviewed manuscripts for following journals and conferences

- 2005-2008. Southern Association of Information Systems Conference
- 2006-Present. America's Conference on Information Systems
- 2007 - 2011. Journal of Information Science & Technology
- 2010 - 2013. ISOneWorld Conference
- 2009. Decision Support Systems
- 2010. Journal of Information Technology for Development
- 2012-Present. Journal of Blindness and Innovation Research
- 2013-Present. Journal of Information Technology & Education: Research
- 2016-Present. Journal of the Association for Information Systems
- 2015-Present. Information Systems Journal
- 2017-Present. AIS Transactions on HCI
- 2016-Present. Computers in Human Behavior

SPECIFIC INTERESTS

Research Areas

- ICT Accessibility and Usability
- Mental Models, Cognitive Models and Problem Solving
- Digital Libraries and Help Mechanisms
- Mobile Assistive Technology
- ICT-Enabled Workplace Inclusion
- Social Media as Informal Learning Environments
- Online Travel Management
- Verbal Protocol Analysis.

Teaching Areas

- Human-Computer Interaction/ Human Factors
- Database Management / SQL Programming
- Information Security/ Cybersecurity

EDUCATION & TRAINING

- *Doctor of Philosophy* in Information Systems (AACSB-Accredited) - University of North Carolina at Greensboro, (2011);
- *Master of Science* in Management Information Systems (AACSB-Accredited) - Central Michigan University, (2005);
- *PG Diploma* in Business Administration – Sambalpur University, India (2003);
- *Diploma* in Computer Applications – Tata Informatics, India. (2001);
- *PG Diploma* in Labor Law & Personnel Management– LLR Law College, India (1998);
- *Master of Science* in Organic Chemistry– Sambalpur University, India, (1996);
- *Bachelor of Science* in Chemistry– G.M. University, India, (1994);