2.3 Research Achievements

2.3.1 Research Experiences

2011:   Nuclear safety culture analysis
2010:   Security and safety evaluation with intelligent DSS
2008:   DSS and AI for energy policy and safeguards research and applications
2006:   DSS and AI for safety and security research and applications
2004–2006: Cost/benefits analysis under various uncertainties with AI techniques for large engineering projects (principal investigator)
2003:   Machinery intelligence for complex systems (robots, reactors, new control room design for power plants)
2001–2006: Adaptive fuzzy control for a Triga Mark III reactor (cooperation with Mexico) (supported by Mexico)
2001–2002: Development of computational intelligent systems for feedwater flow measurements in nuclear power plants (project leader and principal investigator)
2000:   Intelligent systems for industrial engineering (cooperation with Turkey)
2000–2001: Development of a fuzzy-logic-based intelligent tool for uncertainty analysis for nuclear safeguards applications (principal investigator) for IAEA (International Atomic Energy Agency)
1998–1999: Fuzzy control on-line experiments at the BR1 reactor (project leader and principal investigator)
1998:   Decision making under uncertainty by intelligent hybrid systems (principal investigator) (cooperation with China)
1996–1998: Fuzzy logic demo model for OMRON Belgium (project leader and principal investigator)
1994–1998: Development of fuzzy controller for the Belgian Reactor 1 (BR1) (project leader and principal investigator)
1992–1993: Fuzzy decision applications in the field of radiation protection
1991–1993: Development of the time-dependent 3-D finite-element diffusion code TRANSFUSION for nuclear oil well logging applications (principal investigator)
1987–1990: PhD on approximate reasoning and expert systems in Ghent University, Gent, Belgium

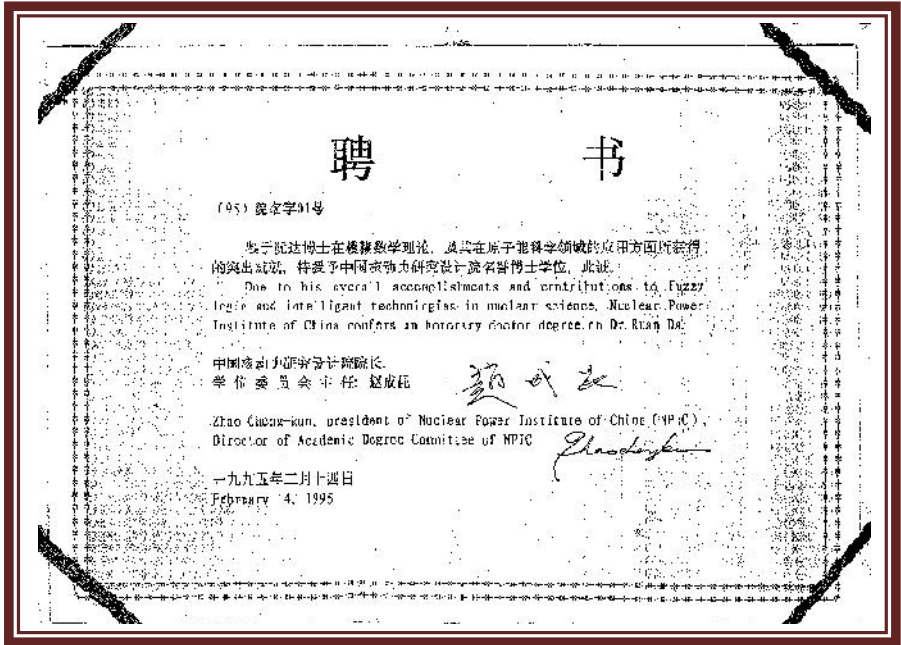### 2.3.2 Grants as a Key Research Scientist

2009–2010: BELSPO Project (12 months), Project no.: c/brs/08
                    A fuzzy multiple attribute decision-making approach for nuclear safeguards information management (60,000 EUR)

2008–2010: ARC Discovery Project, project no. DP0880739
           A Comprehensive Platform for Dynamic Decision Support in
           Warning Systems through Better Management of Uncertain
           Information (UTS, Australia with 191,000 AUS$)
2008–2010: BELSPO Project, project no.: SD/EN/07A
           Sustainable Energy Policy Integrated Assessment – A normative
           contribution to decision support (SCK•CEN, Belgium with 199,477
           EUR out of a total of 599,414 EUR from other partners in Belgium)
2005–2007: China-Flanders project by Flemish Community, project no.: BIL
           011S1105
           Intelligent systems for data mining and information processing:
           methods and applications (Ghent U, Belgium with 50,050 EUR)
2001–2003: The Mexican National Council for Science and Technology
           (CONACYT) project, no.: 218476-5-33797-A
           Adaptive Fuzzy Control and Its Applications in Nuclear Systems
           (ININ, Mexico with 412,720 MEX $)

2.3.3 Awards and Guest Professorships

2009–2012: Adjunct professor, Shanghai Electricity and Power University,
           Shanghai, China
2008–2011: Adjunct professor, Shanghai Maritime University, Shanghai, China
2008–2011: Adjunct professor, Shanghai University, Shanghai, China
2007–2010: Guest professor, Faculty of Applied Economics, Hasselt University,
           Hasselt, Belgium
2007–2012: Adjunct professor, Department of Software, Faculty of Information
           Technology, University of Technology, Sydney, Australia
2005–2013: Guest professor, Department of Applied Mathematics & Computer
           Science, Ghent University, Gent, Belgium
2004–2006: Guest professor, Department of Computer Science & Engineering,
           Xihua University, Chengdu, China
2004–2006: Guest professor, College of Information Science and Technology,
           Donghua University, Shanghai, China
2001–06:   Scientific advisor, the National Institute for Nuclear Research of
           Mexico, for the project "Adaptive fuzzy control and its applications
           in nuclear systems," supported by the Mexican National Council for
           Science and Technology (CONACYT), Mexico
2000– 2011: Advisory professor, Department of Applied Mathematics,
           Southwest Jiaotong University, Chengdu, Sichuan, China
1995–1998: Concurrent professor, School of Resource and Environmental
           Science, Beijing Normal University, China
1995:   Honorary doctor degree, Nuclear Power Institute of China (NPIC),
           Chengdu, Sichuan, China

1995:   Senior science and technology advisor, NPIC, Chengdu, Sichuan, China

1987–1990:   Gent University's scholarship, Gent, Belgium

Da received an honorary doctor degree from the Nuclear Power Institute of China in 1995