1. Name: Arunan Nadarajah

2. Education – degrees, discipline, institution, year: Ph.D. in Chemical Engineering, University of Florida, 1988

M.S. in Chemical Engineering, University of Florida, 1984 B.S. in Chemical Engineering, Indian Institute of Technology, Madras, India, 1983

3. Academic Experience

Professor & Chair, Department of Bioengineering, University of Toledo, 2006 – present. Director of the Center for Materials and Sensor Characterization, Univ. of Toledo, 2009 – 2012 Interim Associate Dean for Research, College of Engineering, University of Toledo, 2004-06. Professor of Chemical & Environmental Engineering, University of Toledo, 2000 – to present Director of Graduate Studies Dept. of Chemical & Environmental Engineering, 1999 – 2006. Assoc. Professor of Chemical & Environmental Engineering, University of Toledo, 1997 – 2000. Associate Professor of Chemical Engineering and Materials Science, University of Alabama in Huntsville, 1996 – 97.

Assistant Professor of Chemical Engineering and Materials Science, University of Alabama in Huntsville, 1990 – 96.

Postdoctoral Research Associate, Center for Microgravity and Materials Research, University of Alabama in Huntsville, 1988 – 90.

Instructor, Department of Mathematics, University of Florida, 1986 – 88.

Graduate Research Assistant, Dept. of Chemical Engineering, University of Florida, 1983 - 86

4. Non-academic experience:

None

- 5. Certifications or professional registrations: None
- 6. Current membership in professional organizations: American Institute for Medical and Biological Engineering (AIMBE), Council of Chairs.

7. Honors and Awards:

Outstanding Engineering Assistant Professor at Univ. of Alabama in Hunstville, 1995. Organized and Chaired the US-Japan Protein Crystallization Workshop, Huntsville, December 1996.

ASEE (NASA) Summer Faculty Fellowship, 1996.

University of Toledo, College of Engineering Outstanding Research Award, 2001 Visiting Scientist at the Japan Atomic Energy Research Institute, Tokai, Japan in March, 2003. Visiting Professor, Indian Institute of Technology, Madras, December, 2008 – January, 2009.

8. Selected Service Activities

Establishment of a electron microscopy and materials characterization facility, in April 2009. Member of the University Graduate Council, 1999-2006, Graduate Council Executive Committee 2002-06, Chair of Graduate Council, 2005-06.

Member of the University Research Council for 2000-01 and 2003-06.

Member of the specially formed University Research Task Force and the University Research Infrastructure Task Force to make recommendations to the Provost, 2000-2001

Member of Engineering Committee on Academic Personnel (ENCAP) for 2000-04, Chair of ENCAP in 2002-2003.

UT representative to the statewide Nanotechnology Task Force in 2001 and the Third Frontier Polymer Task Force in 2003.

9. Recent Publications

- 1. J.G. Lawrence, L.M. Berhan and A. Nadarajah, "Structural Transformation of Vapor Grown Carbon Nanofibers Studied by HRTEM," J. Nanoparticle Research, 10, p1155 (2008).
- 2. A. Nadarajah, J.G. Lawrence and T.W. Hughes, "Development and Commercialization of Vapor Grown Carbon Nanofibers: A Review," Key Eng Materials, 380, p193 (2008).
- 3. J.G. Lawrence, L.M. Berhan and A. Nadarajah, "Elastic Properties and Morphology of Individual Carbon Nanofibers," ACS Nano, 2, p1230 (2008).
- 4. G. Iyer, L.M.V. Tillekeratne, M.R. Coleman and A. Nadarajah, "Equilibrium Swelling Behavior of Thermally Responsive Metal Affinity Hydrogels, Part I: Compositional Effects," Polymer, 49, p3737 (2008).
- 5. G. Iyer, L.M.V. Tillekeratne, M.R. Coleman and A. Nadarajah, "Equilibrium Swelling Behavior of Thermally Responsive Metal Affinity Hydrogels, Part II: Solution Effects," Polymer, 49, p3744 (2008).
- 6. G. Iyer and A. Nadarajah, "Molecular Design of Thermally Responsive Metal Affinity Hydrogels for Contaminant Removal from Wastewater," in New Membranes and Advanced Materials for Wastewater Treatment, A. Mueller, B. Guieysse and A. Sarkar, Editors, ACS Symposium Series, (2010).
- S. Kim, G. Iyer, A.Nadarajah, J.M. Frantz, A.L. Spongberg, Polyacrylamide Hydrogel Properties for Horticultural Applications, International Journal of Polymer Anal. Charact., 15, p 307–318 (2010).
- 8. M. Hamedi Rad, M.H. Imanieh, A. Nadarajah, "Perovskite ceramics and recent experimental progress in reactor design for chemical looping combustion application," Chemical Papers, 69, p627 (2015)
- 9. M.H. Imanieh, M. Hamedi Rad, A. Nadarajah, J. González-Platas, F. Rivera-López and I.R. Martín, "Novel perovskite ceramics for chemical looping combustion application," J. CO2 Utilization, 13, p95 (2016).
- 10. M.H. Imanieh, I.R. Martín, A. Nadarajah, J.G. Lawrence, V. Lavín and J. González-Platas, "Upconversion emission of a novel glass ceramic containing Er3+,Yb3+:Sr1-xYxF2+x nanocrystals," J. Luminescence, 172, p201 (2016).
- 11. L. Rodriguez, A. Avalos, N. Chiaia and A. Nadarajah "Optimization of emulsion cross-linking technique for the preparation of chitosan microparticles," accepted for publication Polymer (2016).

10. Professional development activities in the last five years:

Workshops for administrators at the University of Toledo.