Imalka Munaweera, PhD

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SUMMARY OF QUALIFICATIONS

- Google scholar h index 13
- Inventor of **4 US and a Sri Lankan granted patents** (licensed and commercialized)
- Recipient of TWAS research grant 2020, Sri Lanka NRC-PPP grant 2019 & USA UTSW Center for Translational Medicine's (CTM) pilot grant 2017
- 10+ years of teaching experience in inorganic chemistry, polymer chemistry, general chemistry, organic chemistry, advanced chemical synthesis and instrumental analysis
- 3 years of postdoctoral research experience
- 10+ years of research experience in the field of polymer chemistry, inorganic chemistry, material sciences and nanotechnology
- 10+ years of research experience in instrumentation (FTIR, UV-Vis, PXRD, HPLC, GC-MS, Raman, TGA, DSC, DLS, SEM, TEM etc.)
- 10 years of mentoring experience for high school, undergraduate and graduate students
- Published 8 first authored and 9 co-authored publications
- 50+ invited talks and presentations

EDUCATION

Postdoctoral Training Certificate UT Southwestern Medical Center, Dallas, Texas, USA	2015-2018
Doctor of Philosophy Degree (Ph.D.) in Chemistry, GPA 3.95 The University of Texas at Dallas, Department of Chemistry and Biochemistry, Texas, US	2011-2015 SA
Master of Philosophy Research Degree in Chemical and Process Engineering University of Moratuwa, Sri Lanka	2009-2011
Bachelor of Science (Special Degree) in Chemistry University of Peradeniya, Sri Lanka	2003-2007
EMPLOYMENT	
Senior Lecturer	
University of Sri Jayewardenapura, Nugegoda, Sri Lanka	March 2019- present
Assistant Professor in Chemistry A&M University, Texas, USA	2018-2019
Postdoctoral Researcher	
Department of Radiology, UT Southwestern Medical Center, Dallas, Texas, USA	2015-2018
Graduate Research/Teaching Assistant	
Department of Chemistry, University of Texas at Dallas, Texas, USA	2011-2015
Scientist	
Sri Lanka Institute of Nanotechnology, Sri Lanka	2009-2011
Research and Development Chemist	
Hayleys Dipped Products PLC, Sri Lanka	2008-2009

HONORS AND AWARDS

- (1) Award for Translational Pilot Grant Program 2017-2018, UT Southwestern Center for Translational Medicine (CTM), USA, 2017.
- (2) Society for Thermal Medicine New Investigator Travel Award (Jayne Koskinas Ted Giovanis Foundation), USA, 2017
- (3) Research Day Award: Best Basic Science Poster Presentation, 2016 Radiology department, University of Texas Southwestern Medical Center, USA Presentation: "Localized Delivery of Docosahexaenoic Acid Loaded Low-Density Lipoprotein Nanoparticles to the Rat Brain Using Focused Ultrasound"
- (4) Natural sciences and mathematics scholarship, 2011-2015 School of natural science and mathematics, University of Texas at Dallas, USA
- (5) 1st Place American Chemical Society meeting in miniature graduate student competition, USA, 2015 *Talk: "Nitric oxide and cisplatin releasing wrinkle amine mesoporous silica nanoparticles for treatment of non-small cell lung carcinoma"*
- (6) Finalist The Fiber society's graduate student paper competition- USA, 2014
- (7) 2nd place The Fiber society's graduate student competition- USA, 2014 *Talk: "Novel radiotherapeutic electrospun acrylonitrile-based fiber mats for the treatment of skin cancer"*
- (8) 2nd Place American Chemical Society meeting in miniature graduate student competition, USA, 2014 *Talk: "Novel chemoradiotherapeutic magnetic nanoparticles for targeted treatment of non-small cell lung cancer"*
- (9) Betty and Gifford Johnson graduate scholarship, 2013 School of natural science and mathematics, University of Texas at Dallas, USA
- (10)National science & technology award, Sri Lanka, 2010 Category - Innovative advanced technologies with commercial potential (Awarded by the president of democratic socialist republic of Sri Lanka)

PUBLICATIONS

- (1) Chamalki Madhusha, Imalka Munaweera, Veranja Karunaratne, Nilwala Kottegoda, A Facile Mechanochemical Approach To Synthesizing Edible Food Preservation Coatings Based On Alginate/Ascorbic Acid-Layered Double Hydroxide Bio-Nanohybrids, *Journal of Agricultural and Food Chemistry*, 2020, 68, 8962–8975.
- (2) Chenchen Bing, Yu Hong, Christopher Hernandez, Megan Rich, Bingbing Cheng, **Imalka Munaweera**, Debra Szczepanski, Yin Xi, Mark Bolding, Agata Exner, Rajiv Chopra, Characterization of different bubble formulations for blood-brain barrier opening using a focused ultrasound system with acoustic feedback control, *Scientific Reports*, 2018, 8, 7986.
- (3) **Imalka Munaweera**, Sumbul Shaikh, Danny Maples, Ashish Ranjan, David Greenberg, Rajiv Chopra, Temperature-Sensitive Liposomal Ciprofloxacin for the Treatment of Biofilm on Infected Metal Implants using Alternating Magnetic Fields, *International Journal of Hyperthermia*, 2018, 34, 189-200. (Special issue - Thermal Therapy and Infectious diseases)
- (4) Rajiv Chopra, Sumbul Shaikh, Yonatan Chatzinoff, Imalka Munaweera, Bingbing Cheng, Seth M. Daly, Yin Xi, James J. Howard, Joris Nofiele, Chenchen Bing, Dennis Burns, David E Greenberg, Employing high-frequency alternating magnetic fields for the non-invasive treatment of prosthetic joint infections, *Scientific Reports*, 2017, 7, 7520.
- (5) Nadeesh Madusanka, Chanaka Sandaruwan, Nilwala Kottegodaa, Dinaratne Sirisena, Imalka Munaweera, Ajith De Alwis, Veranja Karunaratne, Gehan A.J. Amaratung, Urea–hydroxyapatite-montmorillonite nanohybrid composites as slow release nitrogen compositions, *Applied Clay Science*, 2017, 150, 303–308. (Journal impact factor 3.641)
- (6) Rohit S Mulik, Chenchen Bing, Michelle Ladouceur-Wodzak, Imalka Munaweera, Rajiv Chopra, Ian R Corbin, Localized delivery of low-density lipoprotein docosahexaenoic acid nanoparticles to the rat brain using focused ultrasound, *Biomaterials*, 2016, 83, 257-268.
- (7) Imalka Munaweera, Michael Trinh, Jessica Hong, and Kenneth J. Balkus Jr. Chemically Powered Nanomotor as a Delivery Vehicle for Biologically Relevant Payloads, *Journal of Nanoscience and Nanotechnology*, 2016, 16, 9063-9071.
- (8) Bhuvaneswari Koneru, Yi Shi, Imalka Munaweera, Mary Wight-Carter, Humam Kadara, Hong Yuan, Anthony J Di Pasqua, Kenneth J Balkus Jr. Radiotherapeutic bandage for the treatment of squamous cell carcinoma of the skin, Nuclear medicine and biology, 2016, 43, 333-338.
- (9) Imalka Munaweera, Shi Yi, Bhuvaneswari Koneru, Ruben Saez, Ali Aliev, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Chemoradiotherapeutic magnetic nanoparticles for targeted treatment of non-small cell lung cancer, *Mol. Pharmaceutics*, 2015, 12, 3588–3596.
- (10)**Imalka Munaweera**, Yi Shi, Bhuvaneswari Koneru, Amit Patel, Mai H. Dang, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Nitric oxide and cisplatin releasing wrinkle amine mesoporous silica nanoparticles for treatment of non-small cell lung carcinoma, *Journal of Inorganic Biochemistry*, 2015, 153, 23-31.
- (11) Imalka Munaweera, Ali Aliev, Kenneth J. Balkus , Jr. Electrospun cellulose acetate-garnet

nanocomposite magnetic fibers for bioseparations, ACS Applied Materials & Interfaces, 2014, 6, 244–251.

- (12)**Imalka Munaweera**, Bhuvaneswari Koneru, Yi Shi, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Chemoradiotherapeutic wrinkled mesoporous silica nanoparticles for use in cancer therapy, *APL Materials*, 2014, 2, 113315 (Invited paper).
- (13)**Imalka Munaweera**, Daniel Levesque-Bishop, Shi Yi, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Radiotherapeutic bandage based on electrospun polyacrylonitrile containing holmium-166 iron garnet nanoparticles for the treatment of skin cancer. *ACS Applied Materials & Interfaces*, 2014, 6, 22250–22256.
- (14)**Imalka Munaweera**, Jessica Hong, Alicia D'Souza, Kenneth J. Balkus Jr. Novel wrinkled periodic mesoporous organosilica nanoparticles for hydrophobic anticancer drug delivery. *Journal of Porous Materials*, 2014, 22, 1-10.
- (15)G P Gunaratne, Nilwala Kottegoda, Nadeesh Madusanka, Imalka Munaweera, Chanaka Sandaruwan, W M G I Priyadarshana, Asitha Siriwardhana, B A D Madhushanka, U A Rathnayake, Veranja Karunaratne, Two new plant nutrient nanocomposites based on urea coated hydroxyapatite: Efficacy and plant uptake, *Indian Journal of Agricultural Sciences*, 86, 494–9.
- (16)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Dinaratne Sirisena, Nimal Dissanayaka, Gihan A.J. Amaratunga and Veranja Karunaratne, The advent of nanotechnology in smart fertilizer, *World Agriculture*, 2012, 3, 27-31.
- (17) Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne, A green slow release fertilizer composition based on urea modified hydroxyapatite nanoparticles encapsulated wood, *Current Science*, 2011,101, 73-78.

PATENTS

- (1) Iron garnet nanoparticles for cancer radiotherapy and chemotherapy, Anthony J. Di Pasqua, Kenneth J. Balkus Jr., **Imalka Munaweera**, Yi Shi (United States Patent US9808543 Granted & Licensed).
- (2) Iron garnet nanoparticles for cancer radiotherapy and chemotherapy, Anthony J. Di Pasqua, Kenneth J. Balkus Jr., **Imalka Munaweera**, Yi Shi (United States Patent and US10195297- Granted & Licensed).
- (3) Compositions for sustained release of agricultural macronutrients and process thereof, Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne. (United States Patent Publication: US8361185 B2- Granted & Commercialized)
- (4) A cellulose based sustained release macronutrient composition for fertilizer application, Nilwala Kottegoda, Imalka Munaweera, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne (United States Patent Publication: US8617284 B2- Granted & Commercialized).
- (5) Elastomeric polymer/spinel nanoparticles composites to introduce special properties to dipped articles, W.S.Fernando, L.P.Nethsinghe, N.S.Kottegoda and M.T.I.S.Munaweera (Publication No: WO/2010/046789, International Application No: PCT/IB2009/051158).
- (6) Dipped gloves based on elastomeric nanocomposites, W.S.Fernando, L.P.Nethsinghe, N.S.Kottegoda and **M.T.I.S.Munaweera**. (Sri Lankan Patent Application No: 15164).

*Patents 3 and 4 above have been extended to China, Mexico, Brazil, Australia, Canada, ARIPO, European Union, India, Vietnam, Philippines, Indonesia, Malaysia, South Africa, and Nigeria.

- (7) Nilwala Kottegoda, Imalka Munaweera, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: Sri Lanka patent application 16963, 2012.
- (8) Nilwala Kottegoda, Imalka Munaweera, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: Malaysia patent application MYPI 2012005244, 2012.
- (9) Nilwala Kottegoda, Imalka Munaweera, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: Philippines patent application PH 1/2012/502408, 2012.
- (10)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: **India patent application** IN2708/MUMNP/2012, 2012.
- (11)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: **Mexico patent application** MX2012014221, 2012.

- (12)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: **Europe patent application** EP2576484, 2012.
- (13)Nilwala Kottegoda, Imalka Munaweera, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: China patent application CN103124710, 2012.
- (14)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: **Canada patent application** CA2801316, 2012.
- (15)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: **Australia patent application** AU2011262310, 2012.
- (16)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka and Veranja Karunaratne. Compositions for sustained release of agricultural macronutrients and processes thereof: **PCT application** PCT/IB20 11/001545, 2011 (National phase filing in 16 countries covering all continents).
- (17)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Sri Lanka patent application** 16968, 2012.
- (18)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Malaysia patent application** MYPI 2012005298, 2012.
- (19)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Philippines patent application** PH 1/2012/502407, 2012.
- (20)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **India patent application** IN2709/MUMNP/2012, 2012.
- (21)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Mexico patent application** MX2012014378, 2012.
- (22)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Europe patent application** EP2576485, 2012.
- (23)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **China patent application** CN102985393, 2012.
- (24)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Canada patent application** CA2801614, 2012.
- (25)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Brazil patent application** BR112012031098, 2012.
- (26)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **Australia patent application** AU2011263433, 2012.
- (27)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **ARIPO application** AP3633, 2012.
- (28)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: **South African patent application** ZA20120009065. 2012.
- (29)Nilwala Kottegoda, Imalka Munaweera, Nadeesh Madusanka, Sunanda Gunasekara, Lilantha Samaranayake, Ajith De Alwis and Veranja Karunaratne. Cellulose based sustained release macronutrient composition for fertilizer application: PCT application PCT/IB201 1/001715, 2011 (National phase filing in 16 countries covering all continents).

INNOVATIONS LEADING TO SALE OF TECHNOLOGY

Two patents (1 and 2 above) were licensed to pharmaceutical startup company, USA . Two patents (3 and 4 above) were purchased by Nagarjuna Fertilzer Ltd., India.

RESEARCH GRANTS

- TWAS research grant- Awarded University of Sri Jayewardenepura Role: PI Amount: USD 14200 Duration: Two-years Project: Development of low-cost nanotechnology-based water filter using bio-based material to remove the heavy metals (Cd, Pb, and As) in contaminated water and to effectively remove hardness in domestic drinking water
- (2) NRC PPP-2019- Awarded University of Sri Jayewardenepura Role: Co-PI Amount: Rs. 42 M Duration: Three-years Project: Waste coconut coir based multi-purpose nano-water filters
- (3) TWAS research grant Awarded University of Sri Jayewardenepura Role: Co-Pl Amount: USD 35,980 Duration: Two-years Project: Functional Alginate-TiO₂-graphene oxide nanohybrids to minimize the post-harvest loss of fruits and vegetables
- UTSW Translational Pilot Program 2017-2018 Funding-Awarded The University of Texas Southwestern Medical School, USA Role: PI Amount: \$35000 Duration: one-year Project: Non-invasive treatment of prosthetic joint infections using alternating magnetic fields

PAPER REVIEW

International Journal of Materials Science and Applications, American Journal of Nanoscience and Nanotechnology, American Journal of Health Research and SOP Transaction on Analytical Chemistry.

CONFERENCE PRESENTATIONS AND CONTRIBUTED ABSTRACTS AWARDS

- (1) Sumbul Shaikh, Yonatan Chatzinoff, Bingbing Cheng, Chenchen Bing, Qi Wang, Imalka Munaweera, Reshu Saini, Christy Pybus, Cecil Futch, Reed Pifer, David Greenberg, Rajiv Chopra, Impact of pulsed alternating magnetic field (AMF) parameters on the eradication of biofilm on metal surfaces: Implications for treatment of prosthetic joint infection, Society of Thermal medicine-35th Annual Meeting, Tucson, Arizona, 2018.
- (2) Imalka Munaweera, Sumbul Shaikh, Yonatan Chatzinoff, Danny Maples, Nandhini Sethuraman, Adane Nigatu, Ashish Ranjan, David E. Greenberg, Rajiv Chopra, Temperature-Sensitive Liposomal Ciprofloxacin for the Treatment of Biofilm on Prosthetic Joint Implants using Alternating Magnetic Fields, Society of Thermal medicine-34th Annual Meeting, Cancún, Mexico, 2017.
- (3) Chenchen Bing, Debra Szczepanski, Imalka Munaweera, Yu Hong, Ian Corbin, Rajiv Chopra, Acoustic emissions during blood-brain barrier disruption with focused ultrasound and real-time feedback control under infusion administration of microbubbles–feasibility study in rodent model, The International Society for Therapeutic Ultrasound (ISTU)- The 17th International Symposium, Nanjing, China, 2017.
- (4) Rajiv Chopra, Sumbul Shaikh, Yonatan Chatzinoff, **Imalka Munaweera**, Bingbing Cheng, Seth M. Daly, Yin Xi, James J. Howard, Cecil Futch, Chenchen Bing, David E Greenberg, Employing high-frequency

alternating magnetic fields for the non-invasive treatment of prosthetic joint infections, Society pf Thermal medicine-34th Annual Meeting, Cancún, Mexico, 2017.

- (5) Jacques Lux, **Imalka Munaweera**, Christopher Malone, Jonathan Minnig, Robert Mattrey, Detection of Pathophysiologic Levels of Hydrogen Peroxide With Ultrasound Imaging Using Enzyme-Containing Nanoparticles, AIUM, Florida, 2017.
- (6) **Imalka Munaweera**, Rohit S. Mulik, Chenchen Bing, Michelle Ladouceur-Wodzak, Rajiv Chopra, Ian R. Corbin, Localized Delivery of Docosahexaenoic Acid Loaded Low-Density Lipoprotein Nanoparticles to the Rat Brain Using Focused Ultrasound, Research day 2016, Radiology, UTSW, Texas, April 26, 2016.
- (7) Yi Shi, Imalka Munaweera, Bhuvaneswari Koneru, Amit Patel, Mai H Dang, Kenneth J Balkus Jr, Anthony J Di Pasqua, Nitric oxide- and cisplatin-releasing amine-modified mesoporous silica nanoparticles for the treatment of non-small cell lung cancer, Research appreciation day, University of North Texas Health Science Center, Fort Worth, April 15, 2016;
- (8) Bhuvaneswari Koneru, Yi Shi, Imalka Munaweera, Emily Zangla, Kenneth J Balkus Jr, Anthony Di Pasqua, Radiotherapeutic Bandage for the Treatment of Skin Cancer, Research appreciation day, University of North Texas Health Science Center, Fort Worth, April 15, 2016;
- (9) Bhuvaneswari Koneru, Yi Shi, **Imalka Munaweera**, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Radiotherapeutic Bandage for the Treatment of Skin Cancer, 2015 AAPS Annual Meeting and Exposition, Oralando, October 25-29, 2015;
- (10)**Imalka Munaweera**, Yi Shi, Bhuvaneswari Koneru, Amit Patel, Mai H. Dang, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Nitric oxide and cisplatin releasing wrinkle amine mesoporous silica nanoparticles for treatment of non-small cell lung carcinoma, 48th American Chemical Society Meeting in Miniature, Arlington, TX, USA, April 25, 2015;
- (11)Yi Shi, **Imalka Munaweera**, Daniel Levesque-Bishop, Ali Aliev, Ruben Saez, Kenneth Balkus, Jr., Anthony Di Pasqua. Neutron-activatable holmium-containing nanoparticles for the treatment of non-small cell lung and skin cancers, Research appreciation day, University of North Texas Health Science Center, Fort Worth, April 17, 2015;
- (12)**Imalka Munaweera**, Novel radiotherapeutic electrospun acrylonitrile-based fiber mats for the treatment of skin cancer, The Fiber Society 2014 Fall Meeting and Technical Conference, Chemical Heritage Foundation, Drexel University, Philadelphia, Pennsylvania, October 22–24, 2014;
- (13)**Imalka Munaweera**, Yi Shi, Bhuvaneswari Koneru, Ruben Saez, Russell Coyle, Ali Aliev, Anthony J. Pasqua and Kenneth J. Balkus. Novel chemoradiotherapeutic magnetic nanoparticles for targeted treatment of non-small cell lung cancer, 14AlChe Annual meeting, Atlanta, GA, November 16-21, 2014;
- (14)Imalka Munaweera, Bhuvaneswari Koneru, Yi Shi, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Chemoradiotherapeutic wrinkled holmium mesoporous silica nanoparticles for use in cancer therapy. 70th Southwest Regional Meeting of the American Chemical Society, Fort Worth, TX, USA, November 19-22, 2014;
- (15)Zijie Wang, **Imalka Munaweera**, Kenneth J. Balkus, Jr., Synthesis of titanium containing porous silica nanospheres with flower-type morphology, 70th Southwest Regional Meeting of the American Chemical Society, Fort Worth, TX, United States, November 19-22, 2014;
- (16)Wijayantha A. Perera, **Imalka Munaweera**, Michael Trinh, Yuchi Gao, John P. Ferraris, Yves J. Chabal, Kenneth J. Balkus, Jr. Binder free graphene-sodium niobate nanotubes/ nanorods composite electrodes for supercapacitors, 70th Southwest Regional Meeting of the American Chemical Society, Fort Worth, TX, United States, November 19-22, 2014;
- (17)Michael N. Trinh, **Imalka Munaweera**, Kenneth J. Balkus Jr., Synthesis of holmium metal-organic cubes for enhanced cancer radiotherapy, 70th Southwest Regional Meeting of the American Chemical Society, Fort Worth, TX, United States, November 19-22, 2014;
- (18)Yi Shi, **Imalka Munaweera**, Daniel Levesque-Bishop, Ali Aliev, Ruben Saez, Kenneth Balkus, Jr., Anthony Di Pasqua. Holmium nanoparticles for the treatment of non-small cell lung and skin cancers, 2014 AAPS Annual Meeting and Exposition, San Diego, November 2-6, 2014;
- (19)Imalka Munaweera, Yi Shi, Bhuvaneswari Koneru, Ruben Saez, Ali Aliev, W. Russell Coyle, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Novel chemoradiotherapeutic magnetic nanoparticles for targeted treatment of non-small cell lung cancer, 248th ACS National Meeting & Exposition, 2014, San Francisco, CA, USA, August 10-14, 2014;
- (20)Imalka Munaweera, Yi Shi, Bhuvaneswari Koneru, Ruben Saez, Ali Aliev, W. Russell Coyle, Anthony J. Di Pasqua, Kenneth J. Balkus Jr. Novel chemoradiotherapeutic magnetic nanoparticles for targeted treatment of non-small cell lung cancer, 47th American Chemical Society Meeting in Miniature, Dallas, TX, USA, April 26, 2014;
- (21)**Imalka Munaweera**, Daniel Levesque-Bishop, Yi Shi, Anthony J Di Pasqua, Kenneth J. Balkus, Jr. Holmium iron garnet containing acrylonitrile-based electrospun bandages for skin tumour therapy, 247th ACS National Meeting & Exposition, Dallas, TX, USA, March 16-20, 2014;

- (22)Imalka Munaweera, Yi Shi, Anthony J Di Pasqua, Kenneth J. Balkus, Jr. Platinum drug loaded holmium iron garnet nanoparticles enhance combination chemotherapy and radiation therapy, 247th ACS National Meeting & Exposition, Dallas, TX, USA, March 16-20, 2014;
- (23)Imalka Munaweera, Jessica Hong, Michael Trinh, K. J. Balkus, Jr. Chemically powered self-propelled nanomotor as a delivery vehicle for biologically relevant payloads. 69th Southwest Regional Meeting of the American Chemical Society, Waco, TX, USA, November 16-19, 2013;
- (24)Daniel S Bishop, **Imalka Munaweera**, Yi Shi, Anthony J Di Pasqua, Kenneth J. Balkus, Jr. Electrospun holmium iron garnet/poly acrylonitrile bandages for skin tumor therapy, 69th Southwest Regional Meeting of the American Chemical Society, Waco, TX, United States, November 16-19, 2013;
- (25)Kenneth J. Balkus, Jr., **Imalka Munaweera**, Yi Shi, Anthony J Di Pasqua, Synthesis and characterization of holmium and dysprosium containing garnet nanoparticles for radiotherapy, 65th Southeast Regional Meeting of the American Chemical Society, Atlanta, GA, United States, November 13-16, 2013;
- (26)**Imalka Munaweera**, Jessica Hong, Michael Trinh, K. J. Balkus, Jr. Chemically powered nanomotor. 246th ACS National Meeting & Exposition, Indianapolis, IN, USA, September 8-12, 2013;
- (27)Imalka Munaweera, K. J. Balkus, Jr. Electrospun cellulose acetate garnet nanocomposite magnetic fibers for bioseparations, 46th American Chemical Society Meeting in Miniature, Dallas, TX, USA, April 26, 2014;
- (28) Imalka Munaweera, K. J. Balkus, Jr. Electrospun cellulose acetate: Garnet nanocomposite fibers with magnetic properties. 245th ACS National Meeting & Exposition, New Orleans, LA, USA, April 7-11, 2013;
- (29)Imalka Munaweera, Jessica Hong, Michael Trinh, K. J. Balkus, Jr. Chemically powered self-propelled nanomotor as a delivery vehicle for biologically relevant payloads. Metroplex Day, University of Texas at Dallas, March13, 2013;
- (30)Jessica Hong, Alicia D'Souza, Imalka Munaweera, Kenneth J. Balkus Jr. Synthesis of Periodic Mesoporous Organosilica (PMO) for Enhanced Drug Delivery, George A. Jeffrey NanoExplorer Symposium, University of Texas at Dallas, August 20, 2013.
- (31)Michael Trinh, Jessica Hong, **Imalka Munaweera**, K. J. Balkus, Jr. Preperation of Self-Propelled Nanoscale Motor. George A. Jeffrey NanoExplorer Symposium, University of Texas at Dallas, August 21, 2012.
- (32)Nilwala Kottegoda, **Imalka Munaweera**, Nadeesh Madusanka et al. Plant nutrient nanoparticles encapsulated cellulose matrix for slow and sustained release of nitrogen. National Nanotechnology Conference, Sri Lanka. 2012, http://dl.nsf.ac.lk/handle/1/9345;
- (33)Eranga Warsakoon, Nuwan Gunawardene, Hasitha Kalahe, **Imalka Munaweera**, Nadeesh Madusanka, Nilwala Kottegoda, Deflourination of Drinking Water using Layered Double Hydroxide, 63-68,Volume 3. International Conference on Sustainable Built Environment. 2010.

PROFESSIONAL TRAINING

- Writing grant applications, University of Texas Southwestern Medical Center, USA 2017
- Laboratory biohazards materials, chemicals and radioactive materials handling training,
 - -University of Texas Southwestern Medical Center, USA 2015
 - -University of North Texas Health Science Center, USA 2014
- Malvern Zetasizer training, India, 2010
- Internal auditing of laboratory management systems (ISO/IEC 17025:2005), 2009
- Exploring opportunities in nanoscience and nanotechnology (Nanotech-2008), 2008

PROFESSIONAL MEMBERSHIPS

- American Chemical Society (ACS)
- Golden Key International Honour Society
- Royal Society of Chemistry (RSC),
- The National Postdoctoral Association (NPA)

02/2011 - Present 06/2014 - Present 06/2015 - Present 07/2015 - Present