

Curriculum Vitae of T M W J Bandara

Researcher unique identifier(s) (ORCID, ID; 0000-0003-1659-3042

ResearcherID: F-9209-2015

1) Personal Information

Family name, First name: Bandara, Thennakoon Mudiyanseelage Wijendra Jayalath

Name with initials: T. M. W. J. Bandara

Address: 21/17, Green Welly, Wevatanna Road, Ampitiya, Kandy, Sri Lanka

Marital status: Married

Sex: Male

Date of birth: 11th of July 1968

2) Education

Degree	Effective Date	Institute/University
Ph.D.	13/07/2010	University of Peradeniya and Postgraduate Institute of Science, Sri Lanka. <i>Thesis: Synthesis and Characterization of Poly(ethylene Oxide) (PEO) - Based and Polyacrylonitrile (PAN) – Based Polymer Electrolytes to be Used in Photoelectrochemical (PEC) Solar Cells.</i>
M.Phil.	01/09/2001	Faculty of Science, University of Ruhuna, Sri Lanka.
B.Sc.	19/02/1996	Faculty of Science, University of Ruhuna, Sri Lanka.

3) Current Position

Position	Period (from-to)	Institute/University
Senior Lecturer	13/07/2010 – Up to date	Faculty of Applied Sciences, Department of Physical Sciences, Rajarata University of Sri Lanka,

4) Previous Positions

Position	Period (from-to)	Institute/University
Probationary Lecturer	17/02/2003 – 13/07/2010	Faculty of Applied Sciences, Department of Physical Sciences, Rajarata University of Sri Lanka.
Visiting Professor	16/08/2013 – 15/09/2013	Faculty of Science, Department of Physics, Centre for Ionics, University of Malaya, Malaysia.
Assistant Lecturer	22/02/1996 – 21/03/1999	Faculty of Science, Department of Physics, University of Ruhuna, Sri Lanka.

5) Institutional Responsibilities

Responsibility	Period (from-to)	Responsibility	Institute/University
Senior Student Counsellor	01/08/2011 – 31/07/2013	Senior Student Counsellor	Faculty of Applied Sciences, Rajarata University of Sri Lanka.
Academic Advisor	01/08/2012– 31/07/2013	Academic Advisor	Faculty of Applied Sciences, Rajarata University of Sri Lanka.
Coordinator Physics	05/02/2012– up to date	Coordinator Physics	Faculty of Applied Sciences, Rajarata University of Sri Lanka.
Member of Higher Degree Committee	20012 – 2015	Member of Higher Degree Committee	Faculty of Applied Sciences, Rajarata University of Sri Lanka.

6) Major Research Collaborations

1. Prof. B.-E Mellander, Research Collaboration, Department of Applied Physics, Chalmers University of Technology/ Sweden.
2. Dr L.R.A.K. Bandara, Research Collaboration, Department of Physics, Faculty of Science University of Peradeniya / Sri Lanka.
3. Dr. L.A.A.De Silva, Department of Physics, University of West Georgia, Carrollton,GA 30118, USA
4. Prof. A.K Arof, Centre for Ionics University of Malaya, Department of Physics, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia.
5. Prof. M.A.K.L. Dissanayake, Institute of Fundamental Studies, Hantana Road, Kandy, Sri Lanka.

7) Organization of Scientific Meetings

Period (from-to)	Event and Venue	Responsibility
28/07/2011– 30/07/2011	Solar Asia 2011; International Conference, Solar Energy Materials, Solar Cells and Solar Energy Applications, Number of participants 109, Sri Lanka	Member, local advisory committee
20/08/2013– 21/08/2013	Workshop on Dye-sensitized Solar Cells, Theory and Laboratory Practical, Number of participants 40, Malaysia	Resource person

8) Prizes and Awards.

Year	Award
2001	Presidential Awards for Research
2009	Presidential Awards for Research
2010	Presidential Awards for Research

2012	Presidential Awards for Research
2011	NRC Merit Award for Scientific Publication Awards for Research
2011	2000 outstanding intellectuals of the 21 st century
2013	Presidential Awards for Research
2013	American chemical society appreciation
2014	Presidential Awards for Research
2015	Presidential Awards for Research

9) Supervision of Graduate Students

Degree	Year Completed	Name of the student	Institute/University
Ph.D.	Thesis submitted	H.D.N.S. Fernando	Faculty of Applied Sciences, Rajarata University of Sri Lanka.
M.Phil.	2014	W.J.M.J.S.R. Jayasundara	Department of Physics, University of Peradeniya, Postgraduate Institute of Science, Sri Lanka.
M.Sc.	2010	Tommy Svensson	Department of Applied Physics, Chalmers University of Technology, Sweden.
M.Sc	2010	Ingamar Svensson-	Department of Applied Physics, Chalmers University of Technology, Sweden
M.Sc	2010	Erik Lundell	Department of Applied Physics, Chalmers University of Technology, Sweden
M.Sc	2015	I. S. Irshad	Department of Physics, University of Peradeniya, Postgraduate Institute of Science, Sri Lanka.
M.Sc	2017	D.G.N. Karunathilaka	Department of Physics, University of Peradeniya, Postgraduate Institute of Science, Sri Lanka.

10) Review Experience in International Peer Reviewed Journals

Served as a reviewer for following Journals; *The Journal of Physical Chemistry* (2012), *Journal of Applied Electrochemistry* (2015, 2016), *Ionics* (2016) *Journal of Power Sources* (2014,2015), *Radiation Physics and Chemistry* (2013, 2014, 2016), *Journal of Renewable and Sustainable Energy* (2014), *Journal Recent Patents on Nanotechnology* (2010), *International Journal of Electroactive Materials* (2013,2014), *Journal of Visualized Experiments* (2012), and *Journal of Materials Science* (2010-2012), *Physical Chemistry Chemical Physics* (2011, 2015)- Royal Society of Chemistry.

11) Editorial Board Contributions

Appointed for the editorial board of the International Journal of Electro-active Materials.

12) Publications

14.1 Publications in Peer-reviewed Scientific Journals

- 1) S. Shah, I.M. Noor, J. Pitawala, I. Albinson, T.M.W.J. Bandara, B.-E. Mellander, A.K. Arof, Plasmonic effects of quantum size metal nanoparticles on dye-sensitized solar cell, *Optical Materials Express* 7(6) (2017) 2069-2083.
- 2) T.M.W.J. Bandara, D.G.N. Karunanayake, J.L. Ratnasekera, L.A.A. De Silva, B.-E. Mellander. Electrical and Complex Dielectric Behavior of Composite Polymer Electrolyte based on PEO, Alumina and Tetrapropylammonium Iodide, *Ionics*, (2017) 1-9, DOI 10.1007/s11581-017-2016-y
- 3) L. Ajith DeSilva, P.K.D.D.P. Pitigala, A. Gaquere-Parker, Ryan Landry, J. E. Hasbun, Victoria Martin, T.M.W.J. Bandara, and A. G. U. Perera. Broad absorption natural dye (Mondo-Grass berry) for dye sensitized solar cell, *Journal of Materials Science: Materials in Electronics*, 28(11) (2017) 7724-7729.
- 4) T.M.W.J. Bandara, H.D.N.S. Fernando, M. Furlani, I. Albinsson, M.A.K., Dissanayake, L.J. Ratnasekera, B.-E. Mellander, Dependence of solar cell performance on the nature of alkaline counter-ion in gel polymer electrolytes containing binary iodides, *J. Solid State Electrochemistry*, 21(6) (2017) 1571-1578.
- 5) T.M.W.J. Bandara, H.D.N.S. Fernando, E.J. Rupasinghe, J.L. Ratnasekera, P.H.N.J., Chandrasena, M.Furlani, I. Albinsson, M.A.K.L. Dissanayake, B.E. Mellander, N719 and N3 dyes for quasi-solid state dye sensitized solar cells-A comparative study using polyacrylonitrile and CsI based electrolytes. *Ceylon Journal of Science*, (2016) 45(2).
- 6) M.A.K.L. Dissanayake, G.K.R. Senadeera, T.M.W.J. Bandara, Mixed cation effect and iodide ion conductivity in electrolytes for dye sensitized solar cells, *Ionics* (2016)1-7, doi:10.1007/s11581-016-1902-z.
- 7) T.M.W.J. Bandara, H.D.N.S. Fernando, M. Furlani, I. Albinsson, M.A.K.L. Dissanayake, B.-E Mellander, Performance enhancers for gel polymer electrolytes based on LiI and RbI for quasi-solid-state dye sensitized solar cells, *RSC Advances*, 6 (105), (2016) 103683-103691.
- 8) T.M.W.J. Bandara, H.D.N.S. Fernando, M. Furlani, I. Albinsson, M.A.K.L. Dissanayake, J.L. Ratnasekera and B.-E. Mellander, Effect of the alkaline cation size on the conductivity in gel polymer electrolytes and their influence on photo electrochemical solar cells, *Phys. Chem. Chem. Phys.*, 18 (2016) 10873.
- 9) T.M.W.J. Bandara, M.F. Aziz, H.D.N.S. Fernando, M.A. Careem, A.K. Arof, B.-E. Mellander, Efficiency enhancement in dye-sensitized solar cells with a novel PAN-based gel polymer electrolyte with ternary iodides, *J. Solid State Electrochem.*, 19 (8), (2015) 2353-2359.
- 10) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, H.D.N.S. Fernando, M.A.K.L. Dissanayake, L.A.A. De Silva, M. Furlani, I. Albinsson and B.-E. Mellander, Efficiency of 10 % for quasi-solid state dye-sensitized solar cells under low light irradiance, *J. Appl. Electrochem.*, 45 (2015) 289-298.
- 11) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, H.D.N.S. Fernando, M.A.K.L. Dissanayake, M. Furlani, I. Albinsson and B.-E. Mellander, Quasi solid state polymer electrolyte with binary iodide salts for photo-electrochemical solar cells, *International J. Hydrogen Energy*, 39 (2014) 2997 -3004.
- 12) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, H.D.N.S. Fernando, M.A.K.L. Dissanayake, L.A.A. De Silva, P.S.L. Fernando, B-E Mellander, Efficiency

- enhancement of dye-sensitized solar cells with PAN:CsI:LiI quasi-solid state (gel) electrolytes *J. Appl. Electrochem.*, 44 (2014) 917–926.
- 13) S.N.F. Yusuf, M.F. Aziz, H.C. Hassan, T.M.W.J. Bandara, B.-E. Mellander, M.A. Careem, A.K. Arof, Phthaloylchitosan-Based Gel Polymer Electrolytes for Efficient Dye-Sensitized Solar Cells, *Journal of Chemistry*. (2014) 1-8 ID 783023, 8 pages <http://dx.doi.org/10.1155/2014/783023>
 - 14) N.Tz. Dinteheva, M. Furlani, W.J.M.J.S.R. Jayasundara, T.M.W.J. Bandara, B-E. Mellander, F.P. La Mantia, Rheological behavior of PAN based electrolytic gel containing tetrahexylammonium and magnesium iodide for photoelectrochemical applications, *J. Rheol. Acta*. 52 (2013) 881-889.
 - 15) T.M.W.J. Bandara, T. Svensson, M.A.K.L. Dissanayake, M. Furlani, W.J.M.J.S.R. Jayasundara, P.S.L. Fernando, I. Albinsson B-E. Mellander, Conductivity behavior in novel quasi-solid-sate electrolyte based on polyacrylonitrile and tetrahexylammonium iodide intended for dye sensitized solar cells, *J. Natn. Sci. Foundation Sri Lanka (JNSF)* 41 (3), (2013) 175-184.
 - 16) W.J.M.J.S.R. Jayasundara, T.M.W. J. Bandara, P.S.L. Fernando, H.D.N.S. Fernado, M.A.K.L. Dissanayake, L.R.A.K. Bandara and B-E Mellander, Conductivity and Thermal Properties of PAN Based Polymer Electrolytes for Possible Application in Photo Electrochemical Solar Cells, *J. Electrical Engineering* 1, (2013) 34-39.
 - 17) M.A.K.L. Dissanayake, C.A. Thotawattbage, G.K.R. Senadeera, T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, B.-E. Mellander, Efficiency enhancement in dye sensitized solar cells based on PAN gel electrolyte with $\text{Pr}_4\text{NI} + \text{MgI}_2$ binary iodide salt mixture, *Electrochemistry, J. Appl. Electrochem.* 43 (2013), 891–901,
 - 18) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, M.Furlani, I. Albinsson, B. –E. Mellander, Effect of cation size on the performance of dye sensitized nanocrystalline TiO_2 solar cells based on quasi-solid state PAN electrolytes containing quaternary ammonium iodides. *Electrochimica Acta*, 109 (2013) 609-616.
 - 19) M.A.K.L. Dissanayake, W.N.S. Rupasinghe, J.M.N.I. Jayasundara, P. Ekanayake, T.M.W.J. Bandara, S.N. Thalawala, V.A. Seneviratne, Ionic conductivity enhancement in the solid polymer electrolyte PEO_9LiTf by nanosilica filler from rice husk ash, *J. Solid State Electrochem.*, 17 (2013) 1775–1783.
 - 20) M.A.K.L. Dissanayake, C.A. Thotawattbage, G.K.R. Senadeera, T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, B.-E. Mellander, Efficiency enhancement by mixed cation effect in dye-sensitized solar cells with PAN based gel polymer electrolyte, *J. Photochemistry and Photobiology A: Chemistry* 246 (2012) 29– 35.
 - 21) T.M.W.J. Bandara, M.A.K.L. Dissanayake, W.J.M.J.S.R. Jayasundara, I. Albinsson, B.-E. Mellander, Efficiency enhancement in dye sensitized solar cells using gel polymer electrolytes based on a tetrahexylammonium iodide and MgI_2 binary iodide system, *Phys. Chem. Chem. Phys.*, 2012, 14, 8620–8627.
 - 22) T.M.W.J. Bandara M.A.K.L. Dissanayake, I. Albinsson, B.-E. Mellander, Mobile charge carrier concentration and mobility of a polymer electrolyte containing PEO and $\text{Pr}_4\text{N}^+\text{I}^-$ using electrical and dielectric measurements, *Solid State Ionics* 189 (2011) 63-68.
 - 23) T.M.W.J. Bandara, T. Svensson, M.A.K.L. Dissanayake, M. Furlani, W.J.M.J.S.R. Jayasundara, B.-E. Mellander, Tetrahexylammonium Iodide Containing Solid and Gel Polymer Electrolytes for Dye Sensitized Solar Cells, *Energy Procedia*, 14, 2012, pages 1607–1612.

- 24) T.M.W.J. Bandara, M.A.K.L. Dissanayake, I. Albinsson, B.-E. Mellander, Dye-sensitized, nano-porous TiO₂ solar cell with poly(acrylonitrile): MgI₂ plasticized electrolyte, *J. Power Sources*, 195, 11 (2010) 3730-3734.
- 25) T. M.W.J. Bandara, M.A.K.L. Dissanayake, I. Albinsson, B.-E. Mellander, Dye sensitized solar cells with poly(acrylonitrile) based plasticized electrolyte containing MgI₂, *Electrochimica Acta*, Volume 55,6 (2010) 2044-2047.
- 26) T.M.W.J. Bandara, P. Ekanayake, M.A.K.L. Dissanayake, I. Albinsson, B.-E. Mellander, A polymer electrolyte containing ionic liquid for possible applications in photoelectrochemical solar cells, *J. Solid State Electrochemistry*, 14 (2010) 1221–1226.
- 27) T.M.W.J. Bandara, B.-E. Mellander, I. Albinsson, M.A.K.L. Dissanayake, H.M.J.C. Pitawala, Thermal and dielectric properties of PEO/EC/Pr₄N⁺I⁻ polymer electrolytes for possible applications in photo-electro chemical solar cells, *J. Solid State Electrochemistry*, 13, 8 (2009) 1227–1232.
- 28) M.E. Fernández, J.E. Diosa, W.O. Bucheli, R.A. Vargas, T.M.W.J. Bandara, B.-E. Mellander, Thermoelectric Studies of the Polymer Electrolyte Poly(Vinyl Alcohol) - AgI –H₂O, *Rev. LatinAm. Metal. Mater.*, S1 (3) (2009)1251-1253.
- 29) T.M.W.J. Bandara, B.-E. Mellander, I. Albinsson, M.A.K.L. Dissanayake, Effect of thermal history and characterization of plasticized, composite polymer electrolyte based on PEO and tetrapropylammonium iodide salt (Pr₄N⁺I⁻), *Solid State Ionics*, 180, 4-5 (2009) 362-367.
- 30) T.M.W.J. Bandara, M.A.K.L. Dissanayake, O.A. Ileperuma, K.Varaprathan, K. Vignarooban, B.-E. Mellander, Polyethyleneoxide (PEO)-based, anion conducting solid polymer electrolyte for PEC solar cells, *J. Solid State Electrochemistry*, 12, (2008) 913-917.
- 31) C.A.N. Fernando, T.M.W.J. Bandara, S.K. Wethasingha, H₂ evolution from photo-electrochemical cell (PEC) with Cu₂O Photo electrode having n-type photo-response under visible light irradiation. *Solar Energy materials and Solar Cells*, 70 (2001) 121-129.

Total number of citations; 386 (Google scholar)

14.2 Peer-reviewed Publications in Conference Proceedings

- 1) T.M.W.J. Bandara, H.D.N.S.Fernando, M. Furlani, I. Albinsson and B.-E. Mellander, Effect of alkaline cation size on the performance of conductivity in gel polymer electrolytes suitable for dye sensitized solar cells, *International Conference on Hybrid and Organic Photovoltaics*, Rome, Italy, 10th to 13th May 2015.
- 2) M. Furlani, E.A. Anvell, S. Ahmad, T.M.W.J. Bandara, C. Busà, D. Franchi, I. Albinsson, B.-E. Mellander, Efficiency variation in gel electrolyte DSSCs containing gold nanoparticles of different size, *International Conference on Hybrid and Organic Photovoltaics*, Rome, Italy, 10th to 13th May 2015.
- 3) A. DeSilva, T.M.W.J. Bandara, H.D.N.S. Fernando, P.S.L. Fernando, M.A.K.L. Dissanayake, W.J.M.J.S.R. Jayasundara, M. Furlani, and B.-E. Mellander, Higher Efficiency for Quasi-Solid State Dye Sensitized Solar Cells Under Low Light Irradiance, *Bulletin of the American Physical Society*, volume 59, 2014.
- 4) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, W.K.D.G.D.R. Charles, M.A.K.L. Dissanayake, Black dye sensitized quasi-solid state solar cells with PAN based electrolyte containing LiI and tetrahexylammonium iodide, *Sri Lanka Association for the*

Advancement of Science 69th Annual sessions 02-06 December 2013, Colombo, Sri Lanka.

- 5) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, V.A. Seneviratne, L.R.A.K. Bandara and B.-E. Mellander, Dye-Sensitized Solar Cells Based on Nano Porous TiO₂ and Gel Polymer Electrolytes Containing Tetrapropylammonium Iodide and 1-methyl-3-Propylimadazolium Iodide Binary Iodide System, *Solar Asia-2013*, 22-24 August 2013, CIUM, University Malaya Kuala Lumpur, Malaysia.
- 6) W.J.M.J.S.R. Jayasundara, T.M.W.J. Bandara, P.S.L. Fernando, H.D.N.S. Fernando, M.A.K.L. Dissanayake, B.-E. Mellander, Thermal and Conductivity Properties of PAN Based Polymer Electrolytes for Possible Application in Photo Electrochemical Solar Cells, *Solar Asia-2013*, 22-24 August 2013, CIUM, University Malaya Kuala Lumpur, Malaysia.
- 7) W.J.M.J.S.R. Jayasundara, T.M.W.J. Bandara, W.K.D.G.D.R. Charles, P.S.L. Fernando, H.D.N.S. Fernando, M.A.K.L. Dissanayake, B.-E. Mellander, Comparison Of Performance Of Quasi-Solid State Solar Cells Sensitized with N719 Dye And N749 (Black) Dye And Based on PAN, LiI And Tetrahexylammonium Iodide (Hex4ni), *Solar Asia-2013*, 22-24 August 2013, CIUM, University Malaya Kuala Lumpur, Malaysia.
- 8) B.-E. Mellander, T.M.W.J. Bandara, Performance of quasi-solid state dye sensitized solar cells in low light irradiance, *Solar Asia-2013*, 22-24 August 2013, CIUM, University Malaya Kuala Lumpur, Malaysia.
- 9) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, P.S.L. Fernando¹, H.D.N.S. Fernando and B.-E. Mellander, The study of effect of cation on the performance of dye sensitized solar cells using gel polymer electrolytes containing different ammonium salts, *4th International Conference on Functional Materials & Devices 2013 (ICFMD - 2013) 08 – 11 April 2013 (ICFMD-2013)*, Penang, Malaysia
- 10) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, P.S.L. Fernando, H.D.N.S. Fernando and B.-E. Mellander, Tetrapentylammonium Iodide Based Novel Gel Polymer Electrolytes for Dye Sensitized Solar Cells, *3rd Annual Research Symposium - 2013, 07 February 2013*, Rajarata University of Sri Lanka, Mihintale, ISSN 2235-9710.
- 11) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, Ajith C. Herath, P.S.L. Fernando, H.D. N.S. Fernando, B.E. Mellander, The Effect Of Gel Polymer Electrolytes Containing CsI And LiI Binary Iodide System On The Efficiency Of Dye-Sensitized Solar Cells, *3rd Annual Research Symposium -2013, 07 February 2013*, Rajarata University of Sri Lanka, Mihintale, ISSN 2235-9710.
- 12) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, Ajith C. Herath, P.S.L. Fernando, H.D.N.S. Fernando, B.E. Mellander, Ion transport parameters in polymer electrolytes by means of dielectric relaxations, *3rd Annual Research Symposium -2013, 07 February 2013*, Rajarata University of Sri Lanka, Mihintale, ISSN 2235-9710.
- 13) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, Ajith C. Herath, P.S.L. Fernando, H.D.N.S. Fernando, B.E. Mellander, Estimation of Ion Transport Parameters in Polymer Electrolytes by Means of Dielectric Relaxations Intended for Photoelectrochemical Solar Cells, *The Young Scientists Forum Symposium-2012*, 18 January 2013, Colombo, Sri Lanka
- 14) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, Ajith C. Herath, P.S.L. Fernando, H.D.N.S. Fernando, B.E. Mellander, Mixed CsI and LiI Binary System containing Gel Electrolyte For Quasi Solid State Dye Sensitized Solar Cells, *The Young Scientists Forum Symposium-2012*, 18 January 2013, Colombo, Sri Lanka.

- 15) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, Ajith C. Herath, P.S.L. Fernando, H.D.N.S. Fernando, B.E. Mellander, Novel Gel Polymer Electrolyte Based on Tetrapentylammonium Iodide and MgI_2 Binary Iodide System for Dye Sensitized Solar Cells, *The Young Scientists Forum Symposium-2012*, 18 January 2013, Colombo, Sri Lanka.
- 16) N.Tz. Dintcheva, M. Furlani, W.J.M.J.S.R. Jayasundara, T.M.W.J. Bandara, B.-E. Mellander, F.P. La Mantia, Polymer Electrolytes Based on PAN and Mixed Salts for Photoelectrochemical Applications: Formulation and Characterization, Nanostructured Polymers, Blends and Composites, *7th MoDeSt Conference 2 - 6 September*, 2012 Prague, Czech Republic. ISBN 978-80-85009-75-0
- 17) T.M.W.J. Bandara, I. Svensson, M. Furlani, W.J.M.J.S.R. Jayasundara, B.-E. Mellander, Dye Sensitized TiO_2 Solar Cells with poly(acrylonitrile) Based Plasticized Electrolyte, *Materials for Tomorrow*, October 18-19, 2011, Chalmers University of Technology, Goteborg, Sweden.
- 18) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, T. Svensson, M. Furlani, I. Albinsson, B.-E. Mellander, Dye sensitized TiO_2 solar cells with polyacrylonitrile based plasticized electrolyte, Presented in Chalmers Annual materials Science Initiative Seminar and The Division of Surface Chemistry and Materials Chemistry Annual Symposium, “*Materials for Tomorrow 2012*”, in Chalmers University of Technology Gothenburg, Sweden.(23-25 October 2012)
- 19) M. Furlani, S. Ahmad, F. Hameed, C.Frisk, T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, F. Bertasi, E.Q.B. Macabebe, V.D. Noto and B.-E. Mellander, Improving efficiency of dye and quantum-dot sensitized solar cells, Presented in Chalmers Annual materials Science Initiative Seminar and The Division of Surface Chemistry and Materials Chemistry Annual Symposium, “*Materials for Tomorrow 2012*”, in Chalmers University of Technology Gothenburg, Sweden. (23-25 October 2012)
- 20) T.M.W.J. Bandara, B.-E. Mellander, I. Svensson, M.Furlani, W.J.M.J.S.R. Jayasundara C. Frisk, Tetrahexylammonium iodide containing gel polymer electrolytes for dye sensitized solar cells and CdS QD sensitized solar cells, Presented as a poster in the “*Chalmers Energy Conference*” Chalmers University of Technology Gothenburg, Sweden.(March 2012).
- 21) T.M.W.J. Bandara, M. Furlani, W.J.M.J.S.R. Jayasundara, I. Albinsson, B.-E. Mellander, Quasi Solid State Polymer Electrolyte with Binary iodides for Photo-electrochemical Solar Cells, *XIII International Symposium on Polymer Electrolytes (ISPE 13)* 26 - 31 August 2012 Selfoss, Iceland.
- 22) M. Furlani, C. Frisk, T.M.W.J. Bandara, B.-E. Mellander, W.J.M.J.S.R. Jayasundara, F. Bertasi, E.Q.B. Macabebe, V. Di Noto, New Synthetic route to prepare CdS Quantum Dots for Sensitized Photoelectrochemical Solar Cells in organic solvents, *XIII International Symposium on Polymer Electrolytes (ISPE 13)* 26 - 31 August 2012 Selfoss, Iceland.
- 23) T.M.W.J. Bandara, T. Svensson, M.A.K.L. Dissanayake, M. Furlani, W.J.M.J.S.R. Jayasundara, B.-E. Mellander, Tetrahexylammonium Iodide containing Solid and Gel Polymer Electrolytes for Dye Sensitized Solar Cells, *2nd International Conference on Advances in Energy Engineering (ICAEE 2011)* December 27-28, 2011, Bangkok, Thailand.
- 24) T.M.W.J. Bandara, T. Svensson, M.A.K.L. Dissanayake, M. Furlani, W.J.M.J.S.R. Jayasundara, B.-E. Mellander, Evidence of self-assembling interface layered structure in

- PAN based polymer electrolytes, *XIII International Symposium on Polymer Electrolytes (ISPE 13)* 26 - 31 August 2012 Selfoss, Iceland.
- 25) T.M.W.J. Bandara, W.J.M.J.S.R. Jayasundara, M.A.K.L. Dissanayake, P.S.L. Fernando, H.D.N.S. Fernando and B.-E. Mellander Effect of Mixed Cations on the Efficiency Enhancement of the Dye Sensitized Solar Cells Based on Gel Polymer Electrolytes Containing CsI and LiI Binary Iodide System, *The First International Conference on Advanced Materials, Science and Engineering (ICAMSE '12) Colombo, Sri Lanka*
 - 26) M. Furlani, T.M.W.J. Bandara, B.-E. Mellander, T. Svensson, W.J.M.J.S.R. Jayasundara, Vito Di Noto, C. Frisk, Tetrahexylammonium Iodide containing Gel Polymer Electrolytes for Dye Sensitized Solar Cells and CdS QD Sensitized Solar Cells, *4th Hybrid and Organic Photovoltaic Conference -Uppsala 2012 (HOPV 12)*.
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14.3 Chapters in Books

T.M.W.J Bandara, B.-E. Mellander, Evaluation of Mobility, Diffusion Coefficient and Density of Charge Carriers in Ionic Liquids and Novel Electrolytes. *In Ionic Liquids: Theory, Properties, New Approaches* Ed. Alexander Kokorin, InTech, Rijeka, Croatia, (2011), 383-406.

14.4 Invited Presentations in Peer-reviewed, International Conferences

- 1) “The Study of Effect of Cation on the Performance of Dye Sensitized Solar Cells Using Gel Polymer Electrolytes Containing Different Ammonium Salts”, *4th Int. Conf. On Functional Materials and Devices, 2013 (ICFMD-2013)* 08–11 April 2013 Penang, Malaysia.
- 2) “Effect of Charge Density of Alkaline Cations on the Performance of Quasi-Solid State Dye Sensitized Solar Cells Based on Gel Polymer Electrolytes” *5th International Conference on Functional Materials & Devices 2015 (ICFMD - 2015)* 4 – 6 August 2015 Johor Bahru, Malaysia.

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By signing below, I certify all information is true and correct to the best of my knowledge.

Signature:



Date: 22/06/2017