

SHANTI K NAVARATNAM

CURRICULUM VITAE

A. BUTIR-BUTIR PERIBADI			
Nama	SHANTI A/P K. NAVARATNAM	Gelaran	DR

B. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN				
Organisasi	Jawatan	Tarikh mula	Tarikh tamat	Kepakaran
Universiti Teknologi MARA	Pensyarah Kanan	31 Mei 2002		Materials Science, Polymer Electrolytes, Cathodes
Institut Teknologi MARA/UiTM	Pensyarah	Julai 1986	Mei 2002	Chemistry

C. ANUGERAH DAN HADIAH			
	Tajuk	Pihak penganjur	Tahun
Anugerah Akademik	Excellent Service Award 2013	UiTM	2013
Anugerah Bukan Akademik			
Anugerah Merit			

D. KERJASAMA INDUSTRI DAN MASYARAKAT		
Pihak berkaitan	Jenis kerjasama	Tahun

E. SENARAI PENERBITAN

Sila masukan nama pengarang, tajuk, nama jurnal, tajuk persidangan, jilid, muka surat dan tahun diterbitkan mengikut format *APA* dan lampirkan *CV* terkini untuk di kemas kini.

<p>ai) Penerbitan artikel dalam jurnal jenis <i>Citation Indexed</i> sebagai pengarang utama atau pengarang bersama</p>	<p>Shanti Navaratnam, Nik Abdul Aziz, Nur Afifah Idris, Siti Zafirah Zainal Abidin (2017) "The Effect of Glycerol on Na⁺ Ion Conductivity and Dielectric Properties of Potato Starch–Chitosan Blend Biopolymer Electrolyte". <i>Journal on Advanced Science, Engineering and Information Technology</i>- Resubmitted with correction</p> <p>S Navaratnam, K Ramesh, S Ramesh, A Sanusi, WJ Basirun, AK Arof, (2015) Transport mechanism studies of chitosan electrolyte systems, <i>Electrochimica Acta</i>, 175,68-73</p> <p>F. N. Zulkefli , S. Navaratnam, A. H. Ahmad ,(2015). Proton conducting in starch polymer complexes electrolytes with ammonium thiocyanate <i>Advanced Materials Research</i> 1112, 275-278</p> <p>Shanti Navaratnam, Azlin Sanusi, A. H. Ahmad, S. Ramesh, K. Ramesh, N. Othman,(2015). Conductivity Studies of Biopolymer Electrolyte Based on Potato Starch/Chitosan Blend Doped With LiCF₃SO₃ , <i>Jurnal Teknologi</i>,75,7.</p> <p>Azlin Sanusi, Shanti Navaratnam and Wan Jeffrey Basirun (2014) Synthesis of Nanocrystalline Olivine LiNiPO₄ Powder Prepared by Sol-Gel Method: Thermal Analysis and XRD Studies <i>The Malaysian Journal of Analytical Sciences</i>, 18,3,522 - 526.</p> <p>Navaratnam, S. Ramesh, K. and Basirun, W. J. . (2011). Investigation of ion conducting behaviour of composite chitosan based electrolytes, <i>Materials Research Innovations</i>,15, S2-184.</p> <p>A Sanusi, MZA Yahya, S Navaratnam, WJ Basirun, Y Alias, NS Mohamed, (2003). Sulphide based anode material or lithium rechargeable battery. <i>Ionics</i> 9 (3-4), 253-257</p>
<p>a ii) Penerbitan artikel dalam jurnal jenis <i>Non-Citation Indexed</i> sebagai pengarang utama atau pengarang bersama</p>	

SHANTI K NAVARATNAM

CURRICULUM VITAE

b) Buku / keratan akhbar / media sosial	
c) Bab di dalam buku	

E. SENARAI PENERBITAN

Sila masukan nama pengarang, tajuk, nama jurnal, tajuk persidangan, jilid, muka surat dan tahun diterbitkan mengikut format *APA* dan lampirkan *CV* terkini untuk di kemas kini.

d) Prosiding, seminar, atau persidangan peringkat kebangsaan dan antarabangsa

Shanti Navaratnam, Nik Abdul Aziz, Nur Afifah Idris, Siti Zafirah Zainal Abidin

Effect of glycerol on Ionic conductivity and Dielectric Properties of Potato Starch-Chitosan Blend biopolymer electrolyte incorporated with Sodium chloride
5th International on **Conference** Sustainable Agriculture, Food and Energy (SAFE2017) August 22-24 Kuala Lumpur

Shanti Navaratnam, Azlin Sanusi and Raja Nur Syahriah Raja Sahrom

Potential of chitosan/agar blend biopolymer films for electrolyte application
The 29th Malaysian Analytical Chemistry Symposium, 15th-17th August 2016, Penang.

S.Navaratnam, A.Sanus, A.H. Ahmad, N.Nordin and F.N.Zulkefli

Investigation on lithium ion conductivity of corn starch based polymer electrolytes plasticised with glycerol.
The 28th Regional Symposium of Malaysian Analytical Sciences, 17th-20th August 2015, Ipoh, Perak.

SHANTI K NAVARATNAM

CURRICULUM VITAE

	<p>F.N.Zulkefli, S.Navaratnam and A.H. Ahmad Structural and electrical studies of starch based biopolymer electrolyte. The 28 th Regional Symposium of Malaysian Analytical Sciences, 17th -20 th August 2015, Ipoh, Perak.</p> <p>A. Sanusi, S Navaratnam and W.J. Basirun Structural and electrochemical characterization of nanocrystalline LiMnPO₄ synthesized by sol gel method. The 28 th Regional Symposium of Malaysian Analytical Sciences, 17th -20 th August 2015, Ipoh, Perak.</p> <p>S. Navaratnam, S. Ramesh, K. Ramesh, W.J.Basirun and A.K. Arof ,Transport mechanism studies of chitosan electrolyte systems, 14th International Symposium on Polymer Electrolytes, Geelong, 24th-29th August 2014</p> <p>Shanti Navaratnam, Azlin Sanusi, S.Ramesh, K.Ramesh and N.Othman, Conductivity Studies of Biopolymer Electrolyte Based on Potato Starch/Chitosan Blend Doped With LiCF₃SO₃. IMCTE, International Symposium on Advanced Polymeric Materials 2014 (ISAPM 2014), 13-16 th May 2014</p> <p>Shanti Navaratnam, Azlin Sanusi and Muhammad Fadhlullah ,Electrical Characterization of Ionic Liquid Based PVC, The 24th Regional Symposium of Malaysia Analytical Sciences, Langkawi, 21st to 23rd November 2011</p> <p>Azlin Sanusi, Shanti Navaratnam and Hezlin Aryani Abd Rahman Investigating the factors that contribute to students anxiety in chemistry laboratory among premedical fast track INTEC students, International Conference On University Education, December 2011</p>
e) Lain-lain	Naquiah Othman, Shanti K Navartnam and Azlin Sanusi , Invention , Innovation and Design, UiTM cawangan Johor, 19 Sept 2013- Student Category -Bronze medal

** Sila tambah ruang / sertakan lampiran sekiranya perlu.

SHANTI K NAVARATNAM

CURRICULUM VITAE

F. SENARAI GERAN PROJEK PENYELIDIKAN					
Jenis projek	Tajuk projek	Peranan (ketua penyelidik / penyelidik bersama)	Tahun	Sumber dana	Status (masih dalam pengajian / bergraduat)
FRGS	Assessment of bacterial polymer from agricultural waste as feed in the preparation of polymer electrolytes.	Ketua penyelidik	2016	RM100000	Masih dalam pengajian
FRGS	Superionic conductor in Poly-Leucine-1,3-Diamino Propane (PLL) doped with NaI–Na ₃ PO ₄ salt	Penyelidik bersama	2014	RM100000	Tamat Pengajian
RACE	Study on Structural, thermal and ion transport mechanism in starch based polymer electrolytes	Ketua penyelidik	2012	RM50000	Tamat Pengajian

** Sila tambah ruang / sertakan lampiran sekiranya perlu.

SHANTI K NAVARATNAM

CURRICULUM VITAE

G. SENARAI PELAJAR PENYELIAAN (Sebagai Pengerusi atau Penyelia Bersama)			
Nama pelajar	Tajuk tesis	Program <i>(PhD / MSc. / Master/ Bachelor)</i>	Status <i>(masih dalam pengajian / bergraduat)</i>
Naquiah Binti Othman	Effect of lithium salt on starch-chitosan polymer electrolyte Sept 2012-June 2013 (Main Supervisor)	<i>Bachelor</i>	Bergraduat
Mohd Faizul Bin Majid	Preparation and characterisation of lithium nickel vanadate cathode material doped with magnesium Sept 2012-June 2013 (Co-Supervisor)	<i>Bachelor</i>	Bergraduat
Dayang Nurul Athifah Bt Abang Shakawi	Characterization of composite starch –chitosan blend polymer electrolyte Sept 2013-June 2014 (Main Supervisor)	<i>Bachelor</i>	Bergraduat
Nurul Fadliana Binti Mohad	Effect of ethylene carbonate on lithium ion conducting polymer electrolyte based on chitosan/starch blend Sept 2013 -June 2014 (Main Supervisor)	<i>Bachelor</i>	Bergraduat
Khairun Nadia Binti Osman	Effect of addition of SiO ₂ nanoparticles on conductivity of starch based polymer electrolytes Jan 2014- Dec 2014 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Nurul Suhaili Abdul Malik	Effect of addition of Al ₂ O ₃ ceramic filler on conductivity performance of starch polymer electrolyte Jan 2014- Dec 2014(Main supervisor)	<i>Bachelor</i>	Bergraduat

SHANTI K NAVARATNAM

CURRICULUM VITAE

Raja Nur Syahriah Binti Raja Sahrom	Preparation and Characterization of chitosan/agar-NH ₄ NO ₃ polymer blend electrolytes Sept 2014-Jun 2015 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Nur Nina Atiqah Bt Salleh)	Ionic conductivity studies of chitosan agar blend solid polymer electrolytes doped with ammonium thiocyanate Sept 2014-Jun 2015 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Yasmin Alwani Bt Yunus	The effect of filler on plasticised starch polymer electrolyte Mac 2015- Jan 2016 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Ahmad Azwan Bin Ali	Plasticizer effect on the properties of biodegradable chitosan /agar blend Mac 2015-Jan 2016 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Ahmad Muzammir B Zulkifli	Electrical properties of proton conducting gel biopolymer based on chitosan –agar blend Mac 2015- July 2016 (Co-supervisor)	<i>Bachelor</i>	Bergraduat
Nur Hazwani Binti Ahmad Nasir	Synthesis and Characterization of doped Lithium Nickel Vanadate cathode material calcined at 800oC Mac 2016-Jan 2017(Main supervisor)	<i>Bachelor</i>	Bergraduat
Nur Amirah Bt Mohamad Ali	Tartaric acid-assisted sol gel synthesis of doped lithium nickel vanadate as cathode material for lithium ion batteries	<i>Bachelor</i>	Bergraduat

SHANTI K NAVARATNAM

CURRICULUM VITAE

	Mac 2016-Jan 2017(Main supervisor)		
Nurul Syazwin Binti Mohamad Rosli	Preparation and Characterization of doped Lithium Nickel Vanadate Cathode material by sol-gel technique using ethylene glycol as gelling agent. Mac2016-Jan 2017(Main supervisor)	<i>Bachelor</i>	Bergraduat
Nurzakiah Binti Hashim	Preparation and Characterization of doped Lithium Nickel Vanadate Cathode Material by Sol-gel technique using PEG as gelling agent Mac 2016-Jan 2017(Main supervisor)	<i>Bachelor</i>	Bergraduat
Nabilah Fatimah Bt. Ramli	Synthesis and characterization of doped Lithium Nickel Vanadate Cathode Material calcined at low temperature Mac 2016-Jan 2017(Main supervisor)	<i>Bachelor</i>	Bergraduat
Siti Raudah Binti Abdul manap	Biopolymer electrolyte between starch and chitosan in NaCl Sept 2016-June 2017 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Nur Afifah Binti Idris	Characterization of plasticised potato starch-chitosan blend biopolymer electrolyte Sept 2016-June 2017 (Main supervisor)	<i>Bachelor</i>	Bergraduat

SHANTI K NAVARATNAM

CURRICULUM VITAE

Nadzmi Bin Mahfuzuddin	Proton conducting polymer electrolyte based on PMMA/ENR50 doped with ammonium iodide Sept 2016-June 2017 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Abdul Rashid Bin Bakri	Proton conduction behaviour in PMMA/ENR50 blend polymer electrolyte with nanocarbon files Sept 2016-June 2017 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Nur Asilah Binti Abd Wahid	Structural, electrical and optical characterization of Na ⁺ doped starch/chitosan polymer electrolyte Mac 2017-Jan 2018 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Siti fahimah Binti M. Sarbani	Potassium ion transport study in solid polymer electrolytes based on chitosan Mac 2017-Jan 2018 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Anis Najihan Binti Ahmad	Sodium ion transport study in solid polymer electrolytes based on chitosan Mac 2017-Jan 2018 (Main supervisor)	<i>Bachelor</i>	Bergraduat
Farah Wahida Binti Azman	Mechanical and conductivitybehaviour of low molecular weight PEO/PU blend electrolyte system Sept 2017- (Main supervisor)	<i>Bachelor</i>	Masih dalam pengajian
Muhamad Syafiq Bin Zainudin Ithnin	Mechanical and conductivity behaviour of high molecular	<i>Bachelor</i>	Masih dalam pengajian

SHANTI K NAVARATNAM

CURRICULUM VITAE

	weight PEO/PU blend electrolyte system Sept 2017- (Co- supervisor)		
Mohd Noor Zairi Bin Mohd Sapri	Effect of ionic liquid on PEO-NaCF ₃ SO ₃ thin film PhD AS950 Science and Technology (Co-supervisor)	<i>PhD</i>	Masih dalam pengajian
Fatin Nadiah Binti Ishak	Quality analysis of Trigona honey from west coast of Peninsular Malaysia AS730 Master of Science applied biology (Co-supervisor)	<i>Master</i>	Lulus Viva
Nik Abdul Aziz B Nik Abd Rahman	Effect of activated Carbon as dispersion Agent in non-homogenous polymer electrolyte blend Master (Research) AS756 Master of Science in chemistry (Supervisor)	<i>Master</i>	Masih dalam pengajian

H. SENARAI HARTA INTELEK

Jenis harta intelek (contoh: <i>Paten, copyright</i>)	Tajuk