

**Third ISE Satellite Student Regional Symposium on**

**Electrochemistry in Ireland**

**Schuler room 7<sup>th</sup> floor**

**Trinity Biomedical Science Institute (TBSI)**

**Trinity College Dublin**

**Ireland**

**Organised by School of Chemistry**

**Thursday 14<sup>th</sup> November 2019**



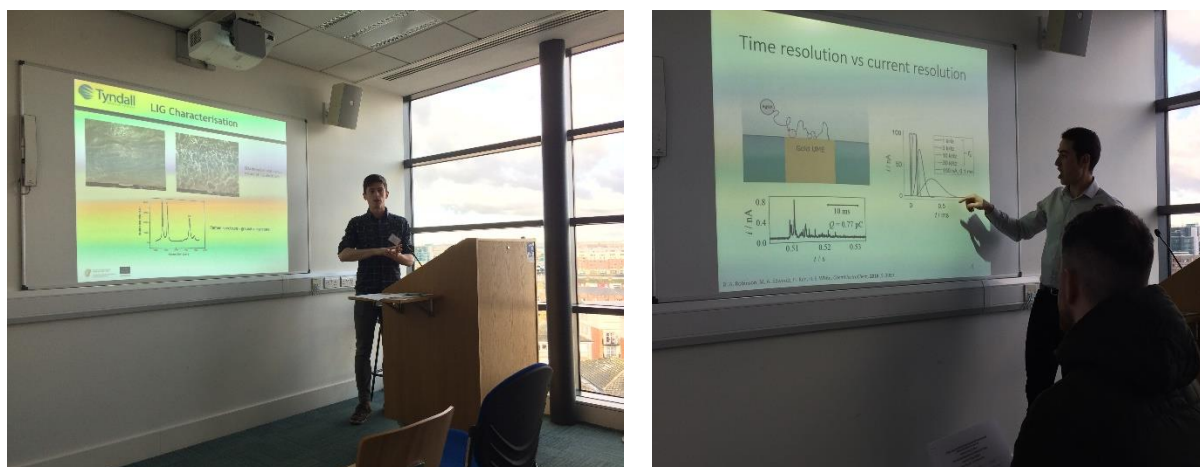
TRINITY  
COLLEGE  
DUBLIN



**Conference Report**

The ‘Third ISE Satellite Student Regional Symposium on Electrochemistry in Ireland’ was held in Trinity college Dublin Ireland, the symposium was attended by 29 electrochemists across Ireland 10 PhD students from Tyndall National Institute in Cork, 6 from Trinity College Dublin, 3 PhD students from University College Cork, 5 PhD students from university of Limerick, 1 student from Queen’s university Belfast, 1 postdoc 1 researcher from Trinity College Dublin, and ISE representative in Ireland (James Rohan) attended the conference.

The registration starts at 10:00 am in the morning and the presentations starts at 11:00 am, Swapnil Ingle welcomed the attendees and highlighted the objectives of the symposium. The session begins with Eoghan Vaughan from Tyndall national Institute on ‘sensitive and selective laser induced graphene electrochemical sensors’ followed up by Fernando Otero Diez from University of Limerick with his topic ‘Electrochemical detection of DNA related to Hepatitis B’. Marc Burnet Cabre from trinity college Dublin talked about his scanning electrochemical cell microscopy (SECCM), Ehren Dixon from Tyndall National Institute presented ‘Lithographic Patterning and Electrodeposition of metals for the construction of micromagnetic devices’ the first season ended by a knowledgeable talk by Claire McKeena from Trinity College Dublin.



*Fig 1 Eoghan Vaughan (Left) and Marc Burnet Cabre (Right) Presentation at the ISE symposium.*

The Lunch season was from 1 hour and the next season starts at 1:50 pm by Ray Speer technology director molecular sensor from Analog Devices who was co-sponsor of the symposium. Dr. James Rohan ISE representative in Ireland encouraged attendees to become a member of ISE, followed by talk of Dr. Alessandro Iannaci from Trinity college Dublin on his topic Microbial fuel cells.



*Fig. 2 Ray Speer (Left) from Analog Devices and Dr. James Rohan (Right) ISE representative in Ireland giving a talk to attendees.*

Poster session took place at 2:50 pm in total 5 PhD students Kankana Paul from Tyndall National Institute, Samia Alsefri, Shifa Fembam from University College Cork, Nataly Ray-Munoz from University of Limerick and Scott Place from Queen's university Belfast presented posters.



*Fig. 3 attendees to the symposium (Left) and Fiona Barry from Tyndall National Institute.*

The last session start with the talk of Ian Seymour from Tyndall National Institute on 'removal of dissolved O<sub>2</sub> interface in the amperometry detection of monochlorinated using pH control methods' followed by Siobhan O' Connor 'Electrochemiluminescence' from University of Limerick, Aaron O' Donoghue and Louise McGrath talked about Li Ion Batteries where Fiona Barry talked about sensor design for electrochemical analysis. The symposium was ended with Prizes which are sponsored by Analog Devices, the prizes are as follows:

### Best oral presentation

1. Siobhan O' Connor, University of Limerick
2. Marc Burnet Cabre, Trinity College Dublin
3. Louise McGrath, Tyndall National Institute

### Best Poster presentation

1. Kankana Paul, Tyndall National Institute
2. Nataly Ray-Munoz, University of Limerick



*Fig. 4 Best oral presentation winner Siobhan O' Connor, University of Limerick with Dr. James Rohan and Swapnil Ingle (Left) and Best Poster winner Kankana Paul, Tyndall National Institute with Dr. James Rohan (Right).*

The symposium was closed with a small reception provided by the organizer to all the participants.

The organizers and all the attendees are very grateful to the ISE for the financial support.

Swapnil Ingle

Dr. Alessandro Iannaci

Organizing committee



*Fig. 5 Participants of third ISE satellite student regional symposium on electrochemistry in Ireland.*

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Time	Title	Speaker	Institution
10:30-11:00	Registration ground floor TBSI/coffee and tea		
11:00-11:10	Welcome and Schedule	Swapnil Ingle	Trinity College Dublin
11:10-11:30	Sensitive and selective laser induced graphene electrochemical sensors	Eoghan Vaughan	Tyndall National Institute
11:30-11:50	Electrochemical detection of DNA related to Hepatitis B	Fernando Otero Diez	University of Limerick
11:50-12:10	Microsecond resolution single Nano-entity electrochemistry via scanning electrochemical cell microscopy (SECCM)	Marc Burnet Cabre	Trinity College Dublin
12:10-12:30	Lithographic patterning and electrodeposition of metals for the construction of micromagnetic devices	Ehren Dixon	Tyndall National Institute
12:30-12:50	PhD. What's next? First step in research funding	Claire McKenna	Trinity College Dublin
12:50-13:50	Lunch break/ posters		
13:50-14:10	Industrial Talk	Ray Speer	Technology Director Molecular sensor Analog devices
14:10-14:30		James Rohan	ISE representative in Ireland
14:30-14:50	Electrografted Aryldiazonium based salts for faster Microbial fuel cells start-up	Alessandro Iannaci	Trinity college Dublin
14:50-15:20	Coffee and tea break/posters		

15:20-15:40	Removal of dissolved O <sub>2</sub> interface in the amperometry detection of monochlorinated using pH control method	Ian Seymour	Tyndall National Institute
15:40-16:00	Electrochemiluminescence of CuInS <sub>2</sub> /ZnS and their Analytical Applications	Siobhan O' Connor	University of Limerick
16:00-16:20	LiF protected Li metal anode	Aaron O' Donoghue	Tyndall National Institute
16:20-16:40	Engineering self-Assembled Porphyrin Aggregates at the liquid liquid interface for solar energy conversion	Ivan f. Robayo Molina	University of Limerick
16:40-17:00	Ionic Liquid based Flexible Polymer Gel Electrolytes for Li Ion batteries	Louis McGrath	Tyndall National Institute
17:00-17:20	Optimising sensor design for electrochemical analysis	Fiona Barry	Tyndall National Institute
17:20-17:40	Electrochemical Surface Plasmon Resonance (ESPR) introduction and Applications	Tarun Narayan	Tyndall National Institute
17:40-18:00	Exchange Spring structure on a Co-Rich CoP single layer amorphous thin film using conventional DC Electrodeposition	Arindam Samanta	Tyndall National Institute

### **Poster Presentation**

	Optimized pattern of Co-Rich CoPtP micromagnets to enhance the performance of fully integrated MEMS Electromagnetic vibration energy harvester	Kankana Paul	Tyndall National Institute
	Development of lab-on-a-chip detection system for environmental monitoring of polychlorinated	Samia Aelsefri	University College Cork

	Biphenyls (PCBs) in soil		
	Development of lab-on-chip electrochemical immunosensor for detection of polycyclic aromatic hydrocarbons (PAH) in environmental water	Shifa Felebam	University College Cork
	Effect of aqueous electrolyte and organic solvent on electron transfer potentials and ionic interactions at an oil-water interface	Nataly Ray-Munoz	University of Limerick
	Electrocatalytic Alcohol Oxidation Using a TEMPO-based Redox Polymer	Scott Place	Queen's University Belfast





**ISE student symposium 2019**

**TBSI, Trinity college Dublin**

**14<sup>th</sup> November 2019**

Attendance Sheet

	First Name	Surname
1.	Md Khairul	Hoque
2.	Michael	Craig
3.	Scott	Place
4.	Hanan	Alatawi
5.	Kankana	Paul
6.	Tarun	Narayan
7.	Samia	Alsefri
8.	Nataly	Rey
9.	Aislan	Esmeraldo Paiva
10.	Shifa	Felemban
11.	Ehren	Dixon
12.	Louise	Mc Grath
13.	Siobhan	O'Connor
14.	Buddini Nissanka	Nissanka Arachchi Appuhamilage
15.	Fernando	Otero
16.	Fiona	Barry
17.	Aaron	O'Donoghue
18.	Marc	Brunet Cabre
19.	Eoghan	Vaughan
20.	IvãjN	Robayo
21.	Alessandro	Iannaci
22.	Ray	Speer
23.	James	Rohan
24.	Claire	Mckenna
25.	Ian	Seymour
26.	Arindam	Samanta
27.	Kushal	Doddakula
28.	Kim	Mckelvey
29.	Swapnil	Ingle