# CURRICULUM VITAE

## Mohamed Barakat Zakaria MOHAMED, PhD.

## BIOGRAPHY

I received my BSc (Chemistry) and MSc degrees (Physical Chemistry) from Tanta University in 2007 and 2011, respectively. Then, I received my PhD (Engineering) from Waseda University, Tokyo, Japan in 2016. My PhD study was the optimized synthesis of PB and PBAs cyano-bridged coordination polymers with precise control over their sizes and shapes, which are used as starting precursors for well-retained nanostructured inorganic materials for drug-delivery, magnetic-guided chemotherapy, adsorption, catalysis, and energy-related applications. In 2016, I was awarded the Japan Society for the Promotion of Science (JSPS) postdoctoral fellowship for two years for researchers who have an excellent record of research achievements. I am doing my postdoctoral research at National Institute for Materials Science as a JSPS Fellow, Tsukuba, Japan. I am a lecturer of Physical Chemistry, Faculty of Science, Tanta University, Tanta, Egypt.

## CONTACT INFORMATION


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| **Name:** | Mohamed Barakat Zakaria MOHAMED |
| **Affiliations:** | [1)] International research Center for Materials Nanoarchitectonics (MANA), National Institute for MaterialsScience (NIMS), 1-1 Namiki, Tsukuba, 305-0044 Japan.<br>[2)] Department of Chemistry, Faculty of Science, Tanta University, Tanta (31527), Egypt. |
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| **Google scholar:** | http://scholar.google.com/citations?hl=en&user=XpPbXcEAAAAJ |
| **ResearchGate:** | https://www.researchgate.net/profile/Mohamed_Zakaria8 |
| **ResearcherID:** | B-1731-2016, URL: http://www.researcherid.com/rid/B-1731-2016 |
| **Scopus:** | https://www.scopus.com/authid/detail.uri?authorId=55203349600 |
| **Page at Tanta University:** | http://tdb.tanta.edu.eg/staff_data/Staff%20Detailed%20Data_en.aspx?MemberID=3435 |


## PERSONAL INFORMATION

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| **Date of Birth:** | 27/04/1986 |
| **Social status:** | Married |
| **Sex:** | Male |
| **Nationality:** | Egyptian |
| **Place of Birth:** | El Mahala El Koubra- El Gharbeya- Egypt |
| **Visa Status:** | Highly Skilled Professional (5 years, valid until 21/09/2021) |
| **Language:** | Arabic (native tongue), English (very good), and Japanese (Fair) |

## EMPLOYMENT HISTORY

1. **March, 2008-February, 2011:** Teaching Assistant (Research and teaching duties) at Department of Chemistry, Faculty of Science, Tanta University, Tanta (31527), Egypt.
2. **August, 2011-December, 2011:** Visiting researcher at the World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Japan.
3. **March, 2011-September, 2016:** Assistant Lecturer (Research and teaching duties) at Department of Chemistry, Faculty of Science, Tanta University, Tanta (31527), Egypt.
4. **September, 2012- July, 2016:** PhD student at Department of Nanoscience and Nanoengineering, Graduate School of Advanced Science and Engineering, Waseda University, Ohkubo 3-4-1, Shinjuku, Tokyo, 169-8555, Japan.
5. **September, 2012- September, 2016:** Visiting researcher at the World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Japan. (Prof. Yusuke Yamauchi (Mesoscale Materials Chemistry group), http://mesochem.xyz/).
6. **October, 2016-until now:** Lecturer of physical chemistry at Department of Chemistry, Faculty of Science, Tanta University, Tanta (31527), Egypt.
7. **September, 2016-until now**: JSPS postdoctoral fellow at the World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Japan. Prof. Toyohiro Chikyow (Personal Investigator, Nano-Elecronics Materials Unit, Semiconductor Device Materials Group)

## EDUCATION

1. **June, 2007:** B. Sc. in Chemistry (Excellent with honor, ranked the first of more than 500 students with general grade 86.98%), Department of Chemistry, Faculty of Science, Tanta University, Tanta (31527), Egypt.
2. **November, 2008:** Graduate studies for one year in physical and inorganic chemistry (Very good, ranked the first of more than 20 students), Department of Chemistry, Faculty of Science Tanta University, Tanta (31527), Egypt.
3. **February, 2011**: M. Sc. in physical chemistry, Department of Chemistry, Faculty of Science Tanta University, Tanta (31527), Egypt. The thesis entitled “The Application of Nanomaterials as Corrosion Inhibitors of Some Metals".
4. **July, 2016**: Doctor of Engineering, Department of Nanoscience and Nanoengineering, Graduate School of Advanced Science and Engineering, Waseda University, Ohkubo 3-4-1, Shinjuku, Tokyo, 169-8555, Japan.

## SCIENTIFIC GRANTS

1. **April 16-22, 2011:** Invited by Prof. Yusuke Yamauchi, World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Japan.
2. **April 21-27, 2012:** Invited by Prof. Yusuke Yamauchi, World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Japan.

## AWARDS

1. **August, 2017**, my oral presentation is highlighted on the meeting scene of IUMRS-ICAM 2017, Kyoto University, Kyoto, **Japan**. http://iumrs-icam2017.net/?paged=5.
2. **July, 2016, JSPS postdoctoral fellowship** for overseas highly qualified researchers to conduct research in Japan for a period of 24 consecutive months.
3. **October, 2016, RSC, Energy & Environmental Science Poster award**, 2015 MANA-RSC symposium: Materials for Energy Generation and Storage, 15-16th October, National Institute for Materials Science (NIMS), Namiki-site, Tsukuba, Japan.

4. **June, 2015, AIP, APL Materials Poster award** at the 2015 International Conference of the Nanospace Materials, Department of Chemistry, National Taiwan University, Taipei, Taiwan.
5. My paper is featured on the front cover of *Chem. Eur. J.* as one of the top 10% publication and got a hot paper.
6. **July, 2012,** Full fellowship and mission from the Egyptian government (for four years).
7. **April, 2012,** Full fellowship for three years from the World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, Japan.
8. **2008**, Student Promotion Award of the Faculty of Science, University of Tanta, Egypt.
9. **2007**, Student Promotion Award of the Egyptian Syndicate of Scientific Professions, Tanta, Egypt.
10. **2006**, Student Promotion Award of the Faculty of Science, University of Tanta, Egypt.
11. **2005**, Student Promotion Award of the Faculty of Science, University of Tanta, Egypt.

## LIST OF PUBLICATIONS

1. **M. B. Zakaria**, T. Nagata, A. A. Belik, T. Takei, S. Tominak, T. Chikyow, "Formation of Molecular Magnetic Thin Films of Ni-Co Cyano-Bridged Coordination Polymers on Silicon Wafers", *J. Appl. Phys.,* **2017**, in review. ID: JAP17-AR-08032.
2. **M. B. Zakaria**, T. Nagata, A. Matsuda, Y. Yasuhara, A. Ogura, Y. Yamauchi, T. Chikyow, "Chemical Synthesis of Multilayered Nanostructured Perovskite Thin Films and Investigation of Dielectric Features", *ACS Appl. Nano Materials*, **2017**, in review.
3. **M. B. Zakaria**, E. M. Ebeid, M. M. Abdel-Galil, T. Chikyow," Cyanide Bridged Coordination Polymer Nanoflakes Thermally Derived $Ni_3C$ and fcc-Ni Nanoparticles", *New. J. Chem.* in press, **2017**.
4. **M. B. Zakaria**, T. Chikyow, "Recent Advances in Prussian Blue and Prussian Blue Analogues: Synthesis and Thermal Treatments", *Coord. Chem. Rev.,* 352, 328-345, **2017**.
5. **M. B. Zakaria**, T. Chikyow, "Synergetic Nanoporous Mn-Ru Oxides as An Efficient Electrocatalyst for Oxygen Reduction Reaction, *New. J. Chem.*, 41, 8196-8202, **2017**.
6. S. Tanaka, R. R. Salunkhe, Y. V. Kaneti, V. Malgras, S. M. Alshehri, T. Ahamad, **M. B. Zakaria**, Y. Yamauchi, M. S. A. Hossain, "Prussian Blue Derived Iron Oxide Nanoparticles Wrapped into Graphene Oxide Sheets for Electrochemical Supercapacitors". *RSC Adv.,* 7, 33994-33999, **2017**.
7. D. S. Kim,[#] **M. B. Zakaria**,[#] M.-S. Park, A. Alowasheeir, S. Alshehri, Y. Yamauchi, H. Kim, "Dual-Textured Prussian Blue Nanocubes as Sodium Ion Storage Materials", *Electrochem. Acta,* 240, 300-306, **2017**. #equal contribution.
8. **M. B. Zakaria**, Md. S. A. Hossain, M. J. A. Shiddiky, M Shahabuddin, E. Yanmaz, J. H. Kim, A. A. Belik, Y. Ide, M. Hu, S. Tominaka, Y. Yamauchi, "Cyano-Bridged Trimetallic Coordination Polymer Nanoparticles and Their Thermal Decomposition into Nanoporous Spinel Ferromagnetic Oxides", *Chem. Eur. J.*, 22,15042-15048, **2016**.
9. **M. B. Zakaria**, C. Li, Q. Ji, B. Jiang, S. Tominaka, Y. Ide, J. P. Hill, K. Ariga, Y. Yamauchi, "Self-Construction from 2D to 3D: One-Pot Layer-by-Layer Assembly of Graphene Oxide Sheets Held Together by Coordination Polymers", *Angew. Chem. Int. Ed.*, 55, 8426-8430, **2016**.
10. **M. B. Zakaria**, C. Li, M. Pramanik, Y. Tsujimoto, M. Hu, V. Malgras, S. Tominaka, Y. Yamauchi, "Nanoporous Mn-Based Electrocatalysts through Thermal Conversion of Cyano-Bridged Coordination Polymers toward Ultra-High Efficient Hydrogen Peroxide Production", *J. Mater. Chem. A* 4, 9266-9274, **2016**.
11. K. Ariga, V. Malgras, Q. Ji, **M. B. Zakaria**, Y. Yamauchi, "Coordination Nanoarchitectonics at Interfaces between Supramolecular and Materials Chemistry", *Coord. Chem. Rev.,* 320-321, 139-152, **2016**.

12. Y. Kamachi,[#] **M. B. Zakaria**,[#] N. L. Torad, T. Nakato, T. Ahamad, S. M. Alshehri, V. Malgras, Y. Yamauchi, "Hydrogels Containing Prussian Blue Nanoparticles toward Removal of Radioactive Cesium Ions", J. Nanosci. Nanotechnol., 16, 4200-4204, **2016**. #equal contribution.
13. **M. B. Zakaria**, "Nanostructuring of Nanoporous Iron Carbide Spheres via Thermal Degradation of Triple-shelled Prussian Blue Hollow Spheres for Oxygen Reduction Reaction", *RSC Adv.,* 6, 10341-10351, **2016**.
14. **M. B. Zakaria**, M. A. Elmorsi, E. M. Ebeid, "Nanostructured $TiO_2$ Coated Stainless Steel for Corrosion Protection", *J. Nanosci. Nanotechnol.,* 16, 9215-9222, **2016**.
15. **M. B. Zakaria**, M. Hu, R. R. Salunkhe, M. Pramanik, K. Takai, V. Malgras, S. Choi, S. X. Dou, J. H. Kim, M. Imura, S. Ishihara, Y. Yamauchi, "Controlled Synthesis of Nanoporous Nickel Oxides with Two-Dimensional Shapes through Thermal Decomposition of Metal-Cyanide Hybrid Coordination Polymers", *Chem. Eur. J.,* 21, 3605-3612, **2015**.
16. **M. B. Zakaria**, Mohamed A. Elmorsi, El-Zeiny M. Ebeid, "Corrosion Protection of Aluminum Metal Using MCM-41 Films Supported by Silver Nanoparticles and Distyrylpyrazine Photopolymer", *Adv. Sci. Eng. Med.,* 7, 423-428, **2015**.
17. **M. B. Zakaria**, A. A. Belik, C.-H. Liu, H.-Y. Hsieh, Y.-T. Liao, V. Malgras, Y. Yamauchi, K. C.-W. Wu, "Prussian Blue Derived Nanoporous Iron Oxides as Anti-Cancer Drug Carriers for Magnetic Guiding Chemotherapy", *Chem. Asian J.,* 10, 1457-1462, **2015**.
18. **M. B. Zakaria**, M. Hu, M. Pramanik, C. Li, J. Tang, A. Aldalbahi, S. M. Alshehri, V. Malgras, Y. Yamauchi, "Synthesis of Nanoporous Ni-Co Mixed Oxides by Thermal Decomposition of Metal-Cyanide Coordination Polymers", *Chem. Asian J.,* 10, 1541-1545, **2015**.
19. R. R. Salunkhe, **M. B. Zakaria**, Y. Kamachi, S. M. Alshehri, T. Ahamad, N. L. Torad, S. X. Dou, J. H. Kim, Y. Yamauchi, "Fabrication of Asymmetric Supercapacitors Based on Coordination Polymer Derived Nanoporous Materials", *Electrochimica. Acta,* 183, 94-99, **2015**.
20. **M. B. Zakaria**, V. Malgras, T. Takei, C. Li, Y. Yamauchi, "Layer-by-Layer Motif Hybridization: Nanoporous Nickel Oxide Flakes Wrapped into Graphene Oxide Sheets toward Enhanced Oxygen Reduction Reaction", *Chem. Commun.,* 51, 16409-16412, **2015**.
21. G. Darabdhara, M. A. Amin, G. A. M. Mersal, E. M. Ahmed, M. R. Das, **M. B. Zakaria**, V. Malgras, S. M. Alshehri, Y. Yamauchi, S. Szunerits, R. Boukherroub, "Reduced graphene oxide nanosheets decorated with Au, Pd and Au-Pd bimetallic nanoparticles as highly efficient catalysts for electrochemical hydrogen generation", *J. Mater. Chem. A,* 3, 20254-20266, **2015**.
22. **M. B. Zakaria**, M. Hu, N. Hayashi, Y. Tsujimoto, S. Ishihara, M. Imura, N. Suzuki, Y.-Y. Huang, Y. Sakka, K. Ariga, Kevin C.-W. Wu, Y. Yamauchi, "Thermal Conversion of Hollow Prussian Blue Nanoparticles into Nanoporous Iron Oxides with Crystallized Hematite Phase", *Eur. J. Inorg. Chem.,* 1137-1141, **2014**.
23. **M. B. Zakaria**, M. Hu, Y. Tsujimoto, Y. Sakka, N. Suzuki, Y. Kamachi, M. Imura, S. Ishihara, K. Ariga, Y. Yamauchi, "Controlled Crystallization of Cyano-Bridged Cu-Pt Coordination Polymers with Two-Dimensional Morphology", *Chem. Asian J.,* 9, 1511-1514, **2014**.
24. **M. B. Zakaria**, H. Ming, M. Imura, R. R. Salunkhe, N. Umezawa, H. Hamoudi, A. A. Belik, Y. Yamauchi, "Single-Crystal-like Nanoporous Spinel Oxides: A Strategy for Synthesis of Nanoporous Metal Oxides Utilizing Metal-Cyanide Hybrid Coordination Polymers", *Chem. Eur. J.,* 20, 17375 -17384, **2014**.
25. **M. B. Zakaria**, N. Suzuki, N. L. Torad, M. Matuura, K. Maekawa, H. Tanabe, Y. Yamauchi, "Preparation of Mesoporous Titania Thin Films with Well-Crystallized Frameworks by Using Thermally-Stable Triblock Copolymer", *Eur. J. Inorg. Chem.,* 2330-2335, **2013**.

26. Norihiro Suzuki, **M. B. Zakaria**, Nagy L. Torad, Kevin C.-W. Wu, Yoshihiro Nemoto, Masataka Imura, Minoru Osada, Y. Yamauchi, "Synthesis of Highly Strained Mesostructured SrTiO3/BaTiO3 Composite Films with Robust Ferroelectricity", *Chem. Eur. J.,* 19, 4446-4450, **2013**.
27. **M. B. Zakaria**, N. Suzuki, K. Shimasaki, N. Miyamoto, Y. T. Huang, Y. Yamauchi, "Synthesis of Mesoporous Titania Nanoparticles with Anatase Frameworks and Investigation of Their Photocatalytic Performance", J. Nanosci. Nanotechnol., 12, 4502-4507, **2012**.
28. N. Suzuki, **M. B. Zakaria**, Y. D. Chiang, K. C. W. Wu, Y. Yamauchi, "Thermally Stable Polymer Composites by Using Colloidal Mesoporous Silica Nanoparticles as Inorganic Fillers", *Phys. Chem. Chem. Phys.,* 14, 7427-7432, **2012**.
29. Nagy L. Torad, H.-Y. Lian, K. C.-W. Wu, **M. B. Zakaria**, N. Suzuki, S. Ishihara, Q. Ji, M. Matsuura, K. Maekawa, K. Ariga, T. Kimura, Y. Yamauchi, "Novel Block Copolymer Templates for Tuning Mesopore Connectivity in Cage-Type Mesoporous Silica Films", *J. Mater. Chem.,* 22, 20008-20016, **2012**.
30. **M. B. Zakaria**, M. A. Elmorsi, E. M. Ebeid, "Corrosion Inhibition of 304 Stainless Steel, Copper and Nickel Metals Using Mesoporous Silicate (MCM-41) and 2, 5- Distyrylpyrazine Photopolymer", *ECS Trans.,* 33, 227-243, **2011**.

## INIVITED TALKS

1. Chemical Synthesis of Multilayered Nanostructured Perovskite Thin Films and Investigation of Dielectric Features, Committee member, European Advanced Materials Congress (EAMC), 25-28 March 2018, Stockholm, **Sweden**.

## CONFERENCES, SYMPOSIUMS AND PRESENTATIONS

1. 1st International Conference for enhancing scientific research, Tanta University, Tanta, **Egypt**, 20-21 February 2008.
2. Second International Environment Forum, Environmental Horizons of sustainable Development, Tanta University, Tanta, **Egypt**, 27-29 November 2008.
3. Mankind Development Conference, Tanta University, Tanta, **Egypt**, April 2008.
4. 2th International Conference for enhancing scientific research: Innovation, Development, Tanta University, Tanta, **Egypt**, 4-5 march 2009.
5. Corrosion Inhibition of 304 Stainless Steel, Copper and Nickel Metals Using Mesoporous Silicate (MCM- 41) and 2, 5- Distyrylpyrazine Photopolymer, 11th International Chemistry Conference in Africa (11 ICCA), Sohag University, Luxor, **Egypt**, 20-23 November 2010.
6. Frontier of Functional-Oxide Nano Electronics-Application to Novel Three Terminal Switches-National Institute for Materials Science (NIMS), Sengen-site, Tsukuba, **Japan**, 10-11 November 2011.
7. The Application of Nano-Materials as Corrosion Inhibitors of Some Metals, World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, 305-0044 **Japan** in the period from 16 to 23 April, 2011.
8. Synthesis and Applications of Mesoporous Materials, World Premier International (WPI) Center for Materials Nanoarchitectonics (MANA) and National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, 305-0044 **Japan** in the period from 22 to 26 April, 2012.
9. Preparation of Mesoporous Titania Thin Films with Well-Crystallized Frameworks by Using Thermally-Stable Triblock Copolymer, FY2012 The Doctoral Program in Students Seminar Program, January 30th, 2013, Waseda-NIMS junior program, National Institute for Materials Science (NIMS), Sengen-site, Tsukuba, **Japan**.
10. MANA International Symposium, February 27 to March 1, 2013, Tsukuba International Congress Center, Tsukuba Epochal, Tsukuba, **Japan**.

11. Synthesis of Photoactive Nanoporous Hematite Iron Oxide with Hollow Interiors Using Prussian Blue Coordination Polymers, Waseda-NIMS joint symposium, March 11th, 2013, National Institute for Materials Science (NIMS), Sengen-site, Tsukuba, **Japan**.
12. Preparation of Cyano-Bridged Coordination Polymers with Well-Defined Shapes and Their Thermal Conversion into Nanoporous Metal Oxides, 8th International Mesostructured Materials Symposium (IMMS), May 20-24, 2013, Awaji Island, Hyogo, **Japan**.
13. Size- and Shape- Controlled Synthesis of Coordination Polymers and Their Conversion to hollow and Nanoporous Materials for The Potential Applications, FY2013 The Doctoral Program in Students Seminar Program, January 15th, 2014, Waseda-NIMS junior program, National Institute for Materials Science (NIMS), Namiki-site, Tsukuba, **Japan**.
14. MANA/ICYS Reunion Workshop, March 3-4, 2014, National Institute for Materials Science (NIMS), Namiki-site, Tsukuba, **Japan**.
15. Sophisticated Crystallization of Coordination Polymers and Their Thermal Conversion into Nanostructured Metals Oxides, the 5th NIMS/MANA-Waseda University International Symposium March 24th, 2014, National Institute for Materials Science (NIMS), Sengen-site, Tsukuba, **Japan**.
16. NIMS Conference 2014, A Strong future from Soft Materials, July 1, Tuesday to 3, Thursday, 2014 (3 days), Venue: Tsukuba International Congress Center, EPOCHAL Tsukuba, Main Convention Hall, organizer, National Institute for Materials Science (NIMS), **Japan**.
17. MANA International Symposium 2015, 11th March-13th March, 2015, NANO EVOLUTION FOR THE FUTURE, Tsukuba International Congress Center EPOCHAL TSUKUBA, 2-20-3, Takezono, Tsukuba, Ibaraki, 305-0032, **Japan**.
18. Controlled Synthesis of Nanoporous Nickel Oxides with Two-Dimensional Shapes through Thermal Decomposition of Metal-Cyanide Hybrid Coordination Polymers, the 2015 International Conference of the Nanospace Materials, Department of Chemistry, National Taiwan University, Taipei, 23-25 June 2015, **Taiwan**.
19. Two-Dimensional Pt/CuO-GO Nanocomposites through Thermal Treatment of Cyano-Bridged Coordination Polymer, the 6th NIMS/MANA-Waseda University International Symposium, Nishi-Waseda Campus, Waseda University, Tokyo, **Japan**.
20. Controlled Synthesis of Nanoporous Nickel Oxides with Two-Dimensional Shapes through Thermal Decomposition of Metal-Cyanide Hybrid Coordination Polymers, the 6th NIMS/MANA-Waseda University International Symposium, Nishi-Waseda Campus, Waseda University, Tokyo, **Japan**.
21. Layer-by-Layer Motif Hybridization: Nanoporous Nickel Oxide Flakes Wrapped into Graphene Oxide Sheets toward Enhanced Oxygen Reduction Reaction, 2015 MANA-RSC symposium: Materials for Energy Generation and Storage, 15-16th October, National Institute for Materials Science (NIMS), Namiki-site, Tsukuba, **Japan**.
22. Coordination Nanoarchitectonics at Interfaces between Supramolecular and Materials Chemistry, The Doctoral Program in Students Seminar Program, January 13th, 2016, Waseda-NIMS junior program, National Institute for Materials Science (NIMS), Namiki-site, Tsukuba, **Japan**.
23. MANA International Symposium 2017, Feb. 28th (Tue) to Mar. 3rd (Fri), the 10th anniversary, Epochal, Tsukuba, **Japan**.
24. Nanoporous Mn-Based Electrocatalysts through Thermal Conversion of Cyano-Bridged Coordination Polymers toward Ultra-High Efficient Hydrogen Peroxide Production, International Conference Recent Trends in Chemistry, ICRTC, 2017, 25-28 April, Hurghada, One of the organizing committee, **Egypt**.

25. Synergetic Nanoporous Mn-Ru Oxides as Efficient Electrocatalysts for Oxygen Reduction Reaction, The 3rd International Symposium on Advanced Inorganic Materials, 2017, 3-5 August, National Institute for Materials Science (NIMS), Namiki 1-1, Tsukuba 305-0044, **Japan**.
26. Mesostructured $SrTiO_3/BaTiO_3$ Hybrid Films by Surfactant-Templated Sol-Gel Pathway with Robust Ferroelectricity, IUMRS-ICAM 2017, from Aug. 26 to Sep. 1, The 15$^{th}$ International Conference in Advanced Materials, Kyoto University, Kyoto, **Japan**. Is highlighted on the meeting scene.
27. Chemical Synthesis of Multilayered Nanostructured Perovskite Thin Films and Investigation of Dielectric Features, 5th Nano Today Conference, December 6-10, 2017, Hawaii, **USA**.
28. Rational design of Mn-Ru cyano-bridged coordination polymer nanocubes derived well-retained nanoporous Mn-Ru mixed oxides for efficient electrocatalysts, has been accepted for a poster presentation, 5th Nano Today Conference, December 6-10, 2017, Hawaii, **USA**.
29. Chemical Synthesis of Multilayered Nanostructured Perovskite Thin Films and Investigation of Dielectric Features, European Advanced Materials Congress (EAMC), 25-28 March 2018, Stockholm, **Sweden**.
30. Graphene-CoNi CPs Hybrid Layers Thermally Derived Well-Retained Graphene-Co2NiO4 Nanocomposite for Hybrid Supercapacitors, European Advanced Materials Congress (EAMC), 25-28 March 2018, Stockholm, **Sweden**.

## TRANING SESSIONS AND WORKSHOPS

1. 14-16 November 2017, Training on using "Scanning tunneling microscope (STM)", CUPAL, National Institute for Materials Science, 1-2-1 sengen, tsukuba, Ibaraki 305-0047, Japan.
2. 25-27 October, 2016 Training session on "Quality standards in the teaching process", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
3. 22-24 October 2016, Training session on "Effective presentation", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
4. 18-20 October 2016, Training session on "Management of the research team", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
5. 15-17 October 2016, Training session on "Financial and legal aspects of university work", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
6. 11-13 October, 2016 Training session on "Communication skills in different types of education", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
7. 8-10 October, 2016 Training session on "Exam systems and evaluation of students", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
8. UNISTRA-NIMS Joint Workshop, January 27, Tue, 2015, WPI-MANA Bld. 1F Auditorium, National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, 305-0044 Japan.
9. Materials Phenomena at Small Scale, Swiss-Japanese Nanoscience Workshop, from 9 to 11 October, 2013, National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba, 305-0044 Japan.
10. 1 Aug., 2011-28 Dec., 2011, Practical training sessions for the use of SEM, TEM, SAXS, wide-angle XRD, TG-DTA, DSC, UV/Vis/IR, BET, Raman spectroscopy, FAM, and other common facilities at the National Institute for Materials Science (NIMS), namiki site, Tsukubs, Ibraki, Japan under supervision of TSS staff.
11. 28-30 September, 2010 Training session on "Strategic Planning", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
12. 14-16 September, 2010 Training session on "The ethics of scientific research", Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.

13. 3-5 August, 2010 Training session on “Student Evaluation and Examination Techniques”, Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
14. 15-16 June, 2010 Training session on “Proposal for postgraduate students”, Tanta Quality Assurance Center (TQAC), Tanta University, Tanta, Egypt.
15. 28-30 October, 2008 Training session on “Time and Meeting Management”, Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
16. 23-25 June, 2008 Training session on “Ethical Principles in University Teaching”, Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.
17. 18-22 June, 2008 Training session on “Teaching with Technology”, Faculty and Leadership Development (FLD) Center of Tanta University, Tanta, Egypt.

## PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

1. Member of International Association of Advanced Materials, Mjärdevi Science Park, Teknikringen 4A S58330, Linköping, Sweden.
2. Member of Egyptian syndicate of scientific professions, Egypt.
3. Member of construction and housing society of Tanta University, Tanta, Egypt.
4. Member of staff members club, Tanta University, Tanta, Egypt.
5. Member of Arab Union of Chemists, KSA.
6. Member of African Association of Pure and Applied Chemistry (AAPA), Egypt.

## REVIWER COMMUNTITIES

1. New Journal of Chemistry (NJC), Royal Society of Chemistry (RSC) publisher.
2. Nanoscale journal, Royal Society of Chemistry (RSC) publisher.
3. Journal of the Taiwan Institute of Chemical Engineers (JTICE), Elsevier publisher.

## INTERESTS

1. Controlled synthesis of nanostructured inorganic materials with fine morphology in nanoregime and the modest control over their size and shape.
2. Electrocatalysts, photocatalysis, supercapacitors, and drug delivery systems applications.
3. Demonstrating multiferroics and thin films fabrication by sol-gel processes, sputtering, electron beam…etc.
4. Fabrication of devices (e.g., electric capacitors).

## REFERENCES

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