CV

A) - Name of the researcher: Yahia CHERGUI

- Date of Birth: 18/10/1967

- ORCHID ID: https://orcid.org/0000-0003-3961-028X

Research

My research field is condensed matter using molecular dynamics, and Dl_poly_4 software; where the title of my Magister was the structure of TiO2SiO2 using molecular dynamics, and my PhD title was the properties of ZnO using molecular dynamics. My new research field is the soft matter using molecular dynamics method for bateriophages.

B) - Professional experience

- Adjunct Instructor: University of Tebessa, Algeria 1992-1994 and 2009-2011 teaching courses in mechanics, electricity, and didactics.
- Supervisor: more than 32 of license students 2009-2020.
- English Language Tutor: 1992-1996
- Business: personal Para Pharmacetical Company 1997-2003.
- Business: partner in Pharmacy 1997-2000.
- Business: personal shop for clothes 1998-2005
- High School Physics Tutor: 2008-2012
- Summer School: Queen's University of Belfast, United Kingdom 2010.
- Assistant professor: Feb.27, 2012 to 27/02/2019, Electrical & Electronics Engineering Institute, M'hamed Bougara University, Boumerdès, Algeria; , Permanent faculty member:, teaching courses in mechanics, electricity, vibrations and waves.
- Visiting postgraduate Student Researcher: University of Cardiff, United Kingdom 2015(Jan-Jul).
- Current Position; Lecurer: 28/02/2019 till today Electrical & Electronics Engineering Institute, M'hamed Bougara University, Boumerdès, Algeria; Permanent faculty member:, teaching courses in mechanics, electricity, Electromagnetism.
- Referee: Journal of Energy (Elsevier), Condensed Matter, Material Research Express (IOP), ACS, and Advanced Materials.

C) – Education

- Bachelor: 1986, Science, Fares Tahar High School, Tebessa, Algeria
- Diplome of Higher Education: 1986-1991, Solid Physics, Badji Mokhtar *University, Annaba, Algeria*
- Magister: Physics, condensed matter surfaces & interfaces, Badji Mokhtar *University, Annaba, Algeria*, 2008.
- PhD: 2008-2019 Badji Mokhtar University Annaba Algeria, Feb.28, 2019.
- License: Law, Badji Mokhtar *University* (fourth year level) 2008



D) - Publications

- 1) Y. CHERGUI, N. Nehaoua and D. E. Mekki. The structural properties of PbF2 by Molecular Dynamics *Eur. Phys. J. Appl. Phys.* 51, 20502 (2010). DIO:10.1051/epjap/2010096
- 2) N.Nehaoua, Y. CHERGUI and D. E. Mekki.Determination of organic solar cell parameters based on single or multiple pin structures, *Vacuum 84 (2010) 326-329*.
- 3) N. Nehaoua, Y. CHERGUI and D. E. Mekki Tandem and single organic solar cells parameters evaluation from illumination I-V plot *Journal of Electron Devices, Vol. 11*, 2011, pp. 515-520
- 4) Y. CHERGUI, N. Nehaoua and D. E. Mekki *Chapitre Solar Cells / Book 2 (first editin July 2011, InTec), ISBN 979-953-307-191-5.* Comparative study of dye-sensitized solar cell based on ZnO and TiO2: parameters evaluation, Edited by Prof. Leonid Kosyachenko Yuriy Fedkovych Chernivtsi National University, Optoelectronics Department, Ukraine.
- 5) N. Nehaoua, **Y. CHERGUI** and D. E. MEKKI *Chapitre Solar Cells / Book 3 (first edition July2011, InTec), ISBN 9-953-307-192-2* A New Model for Extracting the Physical Parameters from I-V Curves of Organic and Inorganic Solar Cells Edited by Prof. Leonid Kosyachenko Yuriy Fedkovych Chernivtsi National University
- 6) Y. CHERGUI, N. Nehaoua and D. E. Mekki, Low and wide gap organic solar cells parameters extraction from illumination current-voltage. *Materials Science, Trade Science, MSAIJ*, 8(4), 2012 [174-178]
- 7) Y. CHERGUI, N. Nehaoua et D. E. Mekki, Photovoltaic characteristics of ZnO Nanotube Dye-Sensitized Solar Cells and TiO2 Nanostructure, *Journal of Material Sciences, Issue 2321-6212*, Page 2347-2278. 2/10/2013
- 8) Y Chergui et al Molecular Dynamics Prediction of Wurtzite ZnO Phase under High and Low Pressures and Temperatures, 2017 Mater. Res. Express 4 115016.

E) – Presentations

- 1) Y. CHERGUI et al. School of R-X 2006, University of Annaba
- 2) Y. CHERGUI et al. 5 TH Arab Congress on Materials Science October 23-25, 2007-Gabes-Tunisia
- 3) Y. CHERGUI et al. International Conference on Modelling and Simulation (MS'07 Algiers)
 July 02-04, 2007
- 4) Y. CHERGUI Methods of Numerical Simulation used in Physics; First Summer School of Physics, University of Mouloud Maammeri, Tizi-Ouzou, Faculty of Sciences
- 5) Y. CHERGUI et al. Physics of Materials and its Applications, *University of Annaba le 25*, 26 et 27 novembre25, 26,27, 2007.
- 6) Y. CHERGUI, N. Nehaoua and D. E. MEKKI
- CCP5/CECAM "Methods in Molecular Simulation Summer School 2010 "at Queen's university Belfast, UK.
- 7) Y. CHERGUI, N. Nehaoua and D. E. MEKKI; Comparative study of dye-sensitized solar cell based on ZnO and TiO2: parameters evaluation *First International Conference on New Materials and Active Devices (NMCA2011), May23rd 25th 2011, University Oum EL-Baouaghi (Algeria).*
- **8**) N. Nehaoua, **Y. CHERGUI** et D. E. MEKKI, A New Model for Extracting the Physical Parameters from I-V Curves of Organic and Inorganic Solar Cells, First *International*

Conference on New Materials and Active Devices (NMCA2011). May 23rd -25th 2011, University Oum EL-Baouaghi (Algeria)

- 9) Y. CHERGUI, N. Nehaoua and D. E. MEKKI Photovoltaic characteristics of ZnO Nanotube Dye-Sensitized Solar Cells and TiO2 Nanostructure. *BIAMS'11 Annaba.2012*.
- 10) Y. CHERGUI, T. Aouaroun, A. Outzergua, and R. CHEMAM. Effect of temperature and pressure on molar volume of ZnO wurtzite phases under extended pressure and temperature a molecular dynamics prediction. International conference on Green energy and recycling December 02-03, 2019 Berlin, Germany.

F) - Organisation of International Confernces

- 1) International Conference on Physics and Networks, June 08-10, 2020, Seoul, South Korea
- 2)- 3rd International Conference On Atomic, Molecular And Optical Physics

G) – Memberships of Scientific Societies

- 1)- The Athens Institute for Education and Research belonging to Physics Unit.
- 2)- EMMC ASBL, European Materials Modelling Council, Silversquare Stéphanie Avenue Louise 54, 1050 Brussels CBE no: 0731 621 312, contact@emmc.eu

H) - Languages

- Arabic (mother tongue) – French (language of studying) - English (language of teaching).

K) Software

- Dl_poly_4: code of research.
- Moldy, dft, Lamps, cristal, VASP, dlpoly_classic, and VMD (summer school and tests).

L) Invited Speaker

- 1) Quantum Optics 2020; Innovative in Quantum Optics and Quantum Computing, March 23-24, 2020 London UK.
- **2)** International Conference on Nanosicince Nanotechnology and Advanced Materials (IC2NM) Hamburg, Germany 3rd -4th December 2019.
- 3) International Institute for Research in Science and Technology (IIRST), (ICOP-19), International Conference on Physics, Milan, Italy November 19, 2019.
- **4)** International Magnetism and Magnetic Materials Conference November 11-12, 2019 Venice, Italy.
- **5**) Ettore Majorana Foundation and Centre for Science Culture, International Conference Transport Phenomena in Complex Environments September 2-6, 2019, Erice(Sicily) Italy.
- **6**) International Conference on Green Energy and Recycling December 02-03, 2019, Berlin, Germany.
- 7) Issaac Newton Institute for Mathematical Science 20 Clarkson Road Cambridge CB 3, OEH, C11C WORKSHOP May 13-17, 2019.
- **8**) 25th International Congress on Glass (ICG2019), the American Ceramic Society, June 9-14, 2019, Boston Park Plaza Hotel, Boston, Massachusetts USA.

- 9) International Conference & Exhibition on Materials & Nanotechnology June 10-12, 2019 Rome, Italy.
- **10)** 3rd International Conference on Nanotechnology and Materials Science July 22-24, 2019 Rome Italy.
- **11**) 5th International Conference on Materials Science & Technology Vancouver Canada April 18-19, 2019.
- 12) Nanotech Forum 2019, July 17-18, 2019, Zurich, Switzerland.
- **13**) Advanced Energy Materials 2019, 21th International Conference on Advanced Energy Materials and Research July 11-12, 2019 Zurich Switzerland.
- 14) 5th World Congress on Environment Science July15-16, 2019, Las Vegas USA.
- **15**) Integrative Approaches to Protein Folding & Aggregation 11-12 June 2019, Workshop.
- **16)** 5th International Conference on Nanotechnology for Renewable Materials, March18-19, 2019, Singapore City, Singapore.
- 17) 5th International Conference and Expo on Ceramics and Composite Materials June3-4, 2019 London, UK.
- **18)** 3rd Europen Conference on Plasma Diagnostics (ECPD), 6-10 May 2019, Lisbon , Portugal.
- 19) The Galileo Institute for Theoritical Physics Arcetri, Plorence Italy Feb.4-15, 2019.
- **20**) International Conference on New Frontiers in Egineering, Science, Law, Mnagement Humanities and Social Science 2019 1NFES-2019, IST-GauhatiUiversity Guwahati India 23th February 2019.
- **21**) 2nd International Conference and Expo on Condenssed Matter Physics October 15-17, 2019 Amesterdom Netherland.
- 22) SPINON, Multifunctional Magnetic Materials Lisbon, 13th Auguest 2018 Portugal.
- 23) 56th Europen High Pressure Research Group (EHPRG), 2-7-September 2018 Aveiro Portugal.
- **24**) Fnirs 2018, October 5-8, 2018 TOKYO JAPAN
- **25**) 4th International Conference on Crystallography &Novel Materials, Crystallography Congress 2018 November19-20, 2018 Bucharest Romania.
- **26**) The 17th International Conference on Nanostructures, Nanomaterials and Nanoengineering (ICNN2018) SAPPORO HOKKAIDO JAPAN October26-29, 2018.
- **27**) AERO 2020 Global Congress on Aerospace and Aeronautical Engineering May18-19, 2020 Miami USA.
- 28) 6th Global Summit & Expo on Laser Optics and Photonics April 13-14, 2020, USA.
- 29) Pharmacetical Chemistry 2020, May 18-19, 2020, Singapore.
- 30) World Congress on NanoScience, Nanotechnology and Advanced Materials during April 20-21 2020 at Dubai, UAE.
- 31) International Conference on Biofuels and Bioenergy July 22-23, 202 London,
- **32**) 3rd international conference on Materials Research Nanotechnology, June 22-24,2019 Osaka Japan (Phronesis Researchers World).
- **33**) International conference on Smart Materials and Structures, Hotel NH Berlin Potsdam Conference Center, Berlin, Germany, March 19 & 20, 2020.3
- **34)** 2nd International Conference & Exhibition on Magnetism & Magnetic Materials December 14-15, 2020 at Lisbon, Portugal.

- **35)** World Congress & Expo on Physics is to be held during September 16-17, 2020 at Barcelona, Spain.
- **36)** International Conference on Physics and Networks, June 08-10, 2020, Seoul, South Korea.
- **37**) 10th Global Nanotechnology Congress and ExpoTheme: Future Challenges and Advanced Innovations in Nanotechnology, nano-2020, November 23-24, 2020 Frankfurt Germany.
- **38)** Euro conference on Catalysis & Chemical Engineering Advancements, March 16-17, 2020 Rome Italy.
- **39**) 21th Congress on Materials Science & Engineering June 22-23, 2020, Rome Italy.
- **40)** ELOS 2020 on September 24-25, 2020 held at Paris, France.