



## Dr. Hani Manssor M Albetran

Position: Associate Professor

### Personal Data

Nationality	Saudi
Date of Birth	1980
Department	Department of Physics – College of Science
Official IAU Email	<a href="mailto:halbatran@iau.edu.sa">halbatran@iau.edu.sa</a>
Office Phone No.	+966 1333 37203
Curtin Email	<a href="mailto:hani.albatran@postgrad.curtin.edu.au">hani.albatran@postgrad.curtin.edu.au</a>

### Language Proficiency

Language	Read	Write	Speak
Arabic	√	√	√
English	√	√	√

### Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2016	PhD	Curtin University	Australia
2012	MSc	Curtin University	Australia
2002/2001	BSc	King Saud University	Saudi Arabia

### PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

<b>PhD</b>	Synthesis and Characterisation of Nanostructured TiO <sub>2</sub> for Photocatalytic Applications
<b>MSc</b>	Nanostructural Mapping of Thermal Stability in Ternary Carbides

### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Associate Professor	Imam Abdulrahman Bin Faisal University-Saudi Arabia	2022 – Now
Assistant Professor	Imam Abdulrahman Bin Faisal University – Saudi Arabia	2017 – 2022
Lecturer	University of Dammam – Saudi Arabia	2013 – 2017
Teaching Assistant	King Faisal University/University of Dammam - Saudi Arabia	2005 – 2013
Teacher	Ministry of Education – Saudi Arabia	2002 – 2005

### Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date



## Scientific Achievements

### Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher, and Date of Publication
1	GM Abu-Taweel, MG Al-Mutary, <b>HM Albetran</b>	Yttrium Oxide Nanoparticles Moderate the Abnormal Cognitive Behaviors in Male Mice Induced by Silver Nanoparticles	Oxidative Medicine and Cellular Longevity (2022)
2	Z Raddaoui, R Brahem, A Bajahzar, <b>HM Albetran</b> , J Dhahri, H Belmabrouk	Structural, double Jonscher response and non-Debye-type relaxor behavior of Ba <sub>0.75</sub> Sr <sub>0.25</sub> Ti <sub>0.9</sub> Zn <sub>0.2</sub> O <sub>3</sub> ceramic	Journal of Materials Science: Materials in Electronics (2021) 32 (18), 23333-23348
3	Mohammad Azam Ansari, <b>Hani Manssor Albetran</b> , Muidh Hamed Alheshibri, Abdelmajid Timoumi, Norah Abdullah Algarou, Sultan Akhtar, Yassine Slimani, Munirah Abdullah Almessiere, Fatimah Saad Alahmari, Abdulhadi Baykal, It-Meng Low	Synthesis Characterization of Electrospun of Their TiO Antibacterial 2 Nanofibers and Antibiofilm Potential against Gram-Positive and Gram-Negative Bacteria	New Insights on Biofilm Antimicrobial Strategies (2021) 8, 227
4	IM Low, <b>HM Albetran</b> , VM de la Prida Pidal, FK Yam	Nanostructured Titanium Dioxide in Photocatalysis	Book, CRC Press (2021)
5	<b>HM Albetran</b>	Investigation of the Morphological, Structural, and Vibrational Behaviour of Graphite Nanoplatelets	Journal of Nanomaterials (2021) 5546509
6	<b>HM Albetran</b>	Structural Characterization of Graphite Nanoplatelets Synthesized from Graphite Flakes	Preprints
7	GM Abu-Taweel, <b>HM Albetran</b> , MG Al-Mutary, M Ahmad, IM Low	Alleviation of silver nanoparticle-induced sexual behavior and testicular parameters dysfunction in male mice by yttrium oxide nanoparticles	Toxicology Reports (2021) 8, 1121-1130
8	Amin Abd El-Moneim, Mohamed Eltohamy, <b>H.M. Albetran</b>	Quantitative analysis and prediction for acoustical properties of alkali borate glasses	Journal of Non-Crystalline Solids (2021) 563, 120826



9	<b>H. Albetran</b>	Thermal expansion coefficient determination of pure, doped, and co-doped anatase nanoparticles heated in sealed quartz capillaries using in-situ high-temperature synchrotron radiation diffraction	Heliyon (2020) 6 (7), e04501
10	Mohammad Azam Ansari, <b>Hani Manssor Albetran</b> , Muidh Hamed Alheshibri, Abdelmajid Timoumi, Norah Abdullah Algarou, Sultan Akhtar, Yassine Slimani, Munirah Abdullah Almessiere, Fatimah Saad Alahmari, Abdulhadi Baykal, It-Meng Low	Synthesis of Electrospun TiO <sub>2</sub> Nanofibers and Characterization of Their Antibacterial and Antibiofilm Potential against Gram-Positive and Gram-Negative Bacteria	Antibiotics (2020) 9 (9), 572
11	IM Low, <b>HM Albetran</b> , M Degiorgio	Structural characterization of commercial graphite and graphene materials	Journal of Nanotechnology and Nanomaterials (2020) 1 (1)
12	<b>H. Albetran</b> , Y Slimani, MA Almessiere, F Alahmari, Sagar E Shirsath, S Akhtar, IM Low, A Baykal, I Ercan	Synthesis, characterization and magnetic investigation of Er-substituted electrospun NiFe <sub>2</sub> O <sub>4</sub> nanofibers	Physica Scripta (2020) 95 (7), 075801
13	IM. Low, <b>H. Albetran</b> , Michael Degiorgio	Structural Characterization of Commercial Graphite and Graphene Materials	J Nanotechnol Nanomaterials. (2020) 1(1): 23-30.
14	MA Almessiere, Y Slimani, A Demir Korkmaz, A Baykal, <b>H Albetran</b> , Tawfik A Saleh, M Sertkol, I Ercan	A study on the spectral, microstructural, and magnetic properties of Eu–Nd double-substituted Ba <sub>0.5</sub> Sr <sub>0.5</sub> Fe <sub>12</sub> O <sub>19</sub> hexaferrites synthesized by an ultrasonic-assisted approach	Ultrasonics Sonochemistry (2020) 62, 104847
15	A Timoumi, <b>HM Albetran</b> , HR Alamri, SN Alamri, IM Low	Impact of annealing temperature on structural, morphological and optical properties of GO-TiO <sub>2</sub> thin films prepared by spin coating technique	Superlattices and Microstructures (2020) 139, 106423
16	<b>HM Albetran</b> , IM Low	Crystallization kinetics study of In-doped and (In-Cr) co-doped TiO <sub>2</sub> nanopowders using in-situ high-temperature synchrotron radiation diffraction	Arabian Journal of Chemistry (2020) 13(2), 3946-3956
17	A Sadaqat, M Almessiere, Y Slimani, S Guner, M Sertkol, <b>H Albetran</b> , A Baykal,	Structural, optical and magnetic properties of Tb <sup>3+</sup> substituted Co nanoferrites prepared via sonochemical approach	Ceramics International (2019) 45(17), 22538-22546



	Sagar E Shirsath, B Ozcelik, I Ercan		
18	H Albetran, IM Low	Parameters controlling the crystallization kinetics of nanostructured TiO <sub>2</sub> -An overview	Materials Today: Proceedings (2019) 16, 25-35
19	ALBETRAN, H., Vega, V., Prida, V. M., & LOW, I. M.	Dynamic Diffraction Studies on the Crystallization, Phase Transformation, and Activation Energies in Anodized Titania Nanotubes	Nanomaterials, (2018) 8(2), 1-9
20	ALBETRAN, H., O'Connor, B. H., & LOW, I. M.	Effect of pressure on TiO <sub>2</sub> crystallization kinetics using in-situ high-temperature synchrotron radiation diffraction	Journal of the American Ceramic Society, (2017) 100(7), 3199-3207
21	ALBETRAN, H., & LOW, I. M.	Crystallization kinetics and phase transformations in aluminum ion-implanted electrospun TiO <sub>2</sub> nanofibers	Applied Physics A, (2016) 122(12), 1044
22	ALBETRAN, H., & LOW, I. M.	Effect of Indium Ion Implantation on Crystallization Kinetics and Phase Transformation of Anodized Titania Nanotubes.	Journal of Materials Research, (2016) 31. 1588-1595.
23	ALBETRAN, H., O'Connor, B. H., & LOW, I. M.	Activation Energies for Phase Transformations in Electrospun Titania Nanofibers: Comparing the Influence of Argon and Air Atmospheres.	Applied Physics A, (2016) 122, 1-9.
24	ALBETRAN, H., O'Connor, B. H., & LOW, I. M.	Effect of Calcination on Band Gaps for Electrospun Titania Nanofibers Heated in Air-Argon Mixtures.	Materials & Design, (2016) 92, 480-485.
25	ALBETRAN, H., DONG, Y. & LOW, I. M.	Characterization and Optimization of Electrospun TiO <sub>2</sub> /PVP Nanofibers Using Taguchi Design of Experiment Method.	Journal of Asian Ceramic Societies, (2015) 3, 292-300.
26	ALBETRAN, H., O'Connor, B. H., PRIDA, V. M., & LOW, I. M.	Effect of Vanadium Ion Implantation on the Crystallization Kinetics and Phase Transformation of Electrospun TiO <sub>2</sub> Nanofibers.	Applied Physics A, (2015) 120, 623-634.
27	ALBETRAN, H., HAROOSH, H., DONG, Y., PRIDA, V. M., O'Connor, B. H., & LOW, I. M.	Phase Transformations and Crystallization Kinetics in Electrospun TiO <sub>2</sub> Nanofibers in Air and Argon Atmospheres.	Applied Physics A, (2014) 116, 161-169.
28	ALBETRAN, H., HAROOSH, H., DONG, Y., O'Connor, B. H., & LOW, I. M.	Effect of Atmosphere on Crystallization Kinetics and Phase Relations in Electrospun TiO <sub>2</sub> Nanofibers.	Ceramics for Environmental and Energy Applications II: Ceramic Transactions, (2014) 246, 125-133.



29	LOW, I. M., <b>ALBETRAN, H.</b> , PRIDA, V. M., VEGA, V., MANURUNG, P., & IONESCU, M.	A Comparative Study on Crystallization Behavior, Phase Stability, and Binding Energy in Pure and Cr-Doped TiO <sub>2</sub> Nanotubes.	Journal of Materials Research, (2013) 28, 304–312.
30	<b>ALBETRAN, H.</b> , ALSAFWAN, A., HAROOSH, H., DONG, Y., & LOW, I. M.	X-ray Diffraction Study on the <i>In-Situ</i> Crystallisation Kinetics in Electrospun PVP/TiO <sub>2</sub> Nanofibers.	Nanostructured Materials and Nanotechnology VII: Ceramic Engineering and Science Proceedings. The American Ceramic Society, (2013) 34, 35–49.
31	LOW, I. M., <b>ALBETRAN, H.</b> , PRIDA, V., MANURUNG, P., & IONESCU, M.	Effect of Chromium Doping on the Crystallization and Phase Stability in Anodized TiO <sub>2</sub> Nanotubes.	Developments in Strategic Materials and Computational Design III: The American Ceramic Society. (2013) 151–158.
32	AZMAN, N. Z. N., SIDDIQUI, S. A., HAROOSH, H. J., <b>ALBETRAN, H.</b> , JOHANNESSEN, B., DONG, Y., & LOW, I. M.	Characteristics of X-ray Attenuation in Electrospun Bismuth Oxide/Poly-Lactic Acid Nanofiber Mats.	Journal of Synchrotron Radiation, (2013) 20, 741–748.

#### Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date
1	<b>H.M. Albetran</b>	Investigation of the morphological, structural, and vibrational behaviour of graphite nanoplatelets	Journal of Nanomaterials	24/5/2021
2	G.M. Abu-Taweel, <b>H.M. Albetran</b> , M.G. AlMutary, M. Ahmad, I.M. Low	Alleviation of silver nanoparticle-induced sexual behavior and testicular parameters dysfunction in male mice by yttrium oxide nanoparticles	Toxicology Reports	29/5/2021



#### Books

#	Name of Investigator(s)	Book Title	Publisher, and Date of Publication
1	It-Meng Low, <b>Hani Manssor Albetran</b> , Victor Manuel de la Prida Pidal, Fong Kwong Yam.	Nanostructured Titanium Dioxide in Photocatalysis	2021. JENNY STANFORD PUBLISHING. Pte. Ltd.

#### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date

#### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date

#### Current Research

#	Research Title	Name of Investigator(s)
1	Synthesis and Characterisation of Nanostructured Transition Metal Oxide, and their Heterostructure for Photocatalytic Applications (2020-086-CED)	<b>Albetran, Hani.</b> , Algarou, Norah., ALHESHIBRI, MUIDH., Low, I.M.
2	Synthesis of bimetallic nanoparticles by laser ablation for antibacterial activity (2021-066-CED)	ALBAROOT, ABBAD., <b>Albetran, Hani.</b> , ALHESHIBRI, MUIDH., Elsayed, Khaled., Kotb Ghareeb, Essam
3	The optimized fabrication of nanobubbles for the enhancement of fish growth (2021-065-PYSS)	ALHESHIBRI, MUIDH., Al-Ahmadi, Nada., ALBAROOT, ABBAD., <b>Albetran, Hani.</b> , Alshamlah, Mohammed., Elsayed, Khaled
4	Effect of nanomaterials on brain biochemistry and neurobehavior in male mice	Gasem Mohammad Abu-Taweel, Mohsen Ghaleb Al-Mutary, <b>Hani Mohammad Albetran</b> , Mohammad Ahmad, It Meng Low
5	Characterization structure of synthesized graphite nanoplatelet from ultrasonic flake graphite powdering technique	<b>Albetran, Hani</b>



### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	The 8th Asia-Oceania Ceramic Federation Conference (AOCF-8)	August 28-29, <b>2019</b> IMPACT Muang Thong Thani, Thailand	ADV-I-05
2	The 6th International Symposium on Advanced Ceramics (ISAC-6) in conjunction with the 7th Asia-Oceania Ceramic Federation Conference (AOCF-7)	March 12-14, <b>2018</b> at Katahira Sakura Hall, Tohoku University, Sendai, Japan	B12-15 & C12-21
3	International Symposium on Advanced Polymeric Materials 2016 ISAPM	Putra World Trade Centre (PWTC), Kuala Lumpur, Malaysia, 16 <sup>th</sup> – 19 <sup>th</sup> May <b>2016</b> .	Invited Speaker, Low, I.M. and <b>Albetran, H.</b>
4	The 2 <sup>nd</sup> World Congress on Materials Science, Polymer Engineering, and Microtechnologies	November 28-30, <b>2016</b> , Novotel, Abu Dhabi-Al Bustan, UAE	Title #1: Electrospinning of Polymeric Nanofibers. Title #2: Effect of Atmosphere on The Band Gap of Electrospun Titania Nanofibers
5	Australian X-ray Analytical Association (AXAA)	CSIRO laboratories in Waterford, Perth, Australia, 10 December, <b>2015</b> .	<b>Awarded <i>Second Prize</i></b>
6	International Conference on High Performance Ceramics (CICC-9)	Guilin, China, November 4 – 7, <b>2015</b> .	Paper ID# H2-001 & Paper ID# H2-101 & Paper ID# H2-102
7	Asia Oceania Forum for Synchrotron Radiation Research (AOFSSRR)	Australian Synchrotron, Melbourne, Australia, 25 – 27 November, <b>2015</b> .	Paper ID# 40
8	International Conference and Expo on Advanced Ceramics and Composites (ICACC'13)	27 January –1 February, <b>2013</b> . Daytona Beach, Florida, (USA).	S7-014-2013

### Memberships of Scientific and Professional Societies and Organizations:

- Member of the Department of Physics and Astronomy, Curtin University.
- User of the Australian Synchrotron.
- Member of the Australian X-ray Analytical Association (AXAA).
- User of the John De Laeter Center of Excellence (XRD, SEM, and FESEM).



- Reviewer for the Journal of the American Ceramic Society.
- Reviewer for the Journal of Nanomaterials.
- Reviewer for the Journal of Asian Ceramic Societies.
- Reviewer for the Journal of the Part C: Journal of Mechanical Engineering Science.
- Reviewer for the Journal of Catalysts.
- Reviewer for the Journal of Nano Express.
- Reviewer for the Journal of Applied Sciences.

### Teaching Activities

#### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (No. of lectures/Tutorials. Or labs, Clinics)
1	Fundamentals of Physics	312 Phys	Lecture
2	General Physics course 1	102 Phys	Lab
3	General Physics course 2	103 Phys	Lab
4	General Physics	101 Phys	Lab
5	Physics and life	100 Phys	Lab
6	Laboratory wavelike phenomena	291 Phys	Lab
7	Modern Physics Laboratory	392 Phys	Lab
8	Materials and Technology	112 M & T	Lab
9	Physics (College of Computer Science & Information Technology)	212 Phys	Lecture
10	Physics (132) for Engineering Track (ET)	132 Phys	Lecture
11	Solid state Physics I: Structure of Materials and Diffraction	406 Phys	Lecture
12	Physics Project Seminar	509 Phys	Lecture

#### Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

1	Fundamentals of Physics – 312 Phys (College of Education)
2	Physics – 212 Phys (College of Computer Science & Information Technology)
3	Physics - 132 for Engineering Track (ET) at the PREP-YEAR Deanship.
4	Solid state Physics I: Structure of Materials and Diffraction- B.Sc. in Physics
5	Physics Project Seminar- B.Sc. in Physics





### Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	To
1	Fundamentals of Physics – 312 Phys	√		√		2016	2020
2	Physics – 212 Phys (College of Computer Science & Information Technology)	√	√	√		2020	2021

### Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	Subject	College and University or Program	Date

### Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	BSc- College of Education	7	2016	2020
2	BSc- College of Science	16	2021	Now

### Committee Membership

#	From	To	Position	Organization
1	2005	2006	Member and coordinator of the educational affairs committee	College of Education (Formerly Known: Teachers College) - King Faisal University/ University of Dammam
2	2006	2007	Member of the committee for developing laboratories	
3	2007	2008	Member of the Social Activity Committee	
4	2007	2008	Member of the Student Interview Committee	
5	2008		Member of the Elections Committee of the President of the Department of Physics	
6	2008		Member of the Practical Physics notes Committee	
7	2016	2020	Chairman of the Committee of Labs and Procurement	College of Education – Imam Abdulrahman Bin Faisal University (Formerly Known: University of Dammam).



### Volunteer Work

#	From	To	Type of Volunteer	Organization
1	2013/6	2013/12	Teaching	Department of Physics and Astronomy, Curtin University

### Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Microsoft Office (Excel, Outlook, PowerPoint, and Word)
2	X-ray diffractometer (XRD), and Synchrotron radiation diffractometer (SRD)
3	Scanning electron microscope (SEM), and field emission scanning electron microscope (FESEM)
4	UV/visible spectrophotometer
5	Differential thermal analysis (DTA), and Thermogravimetric analysis (TGA)
6	Topas, Rietica, CMPR, Match, GSAS, JADE, PDF-4+2103, Diffrac EVA 3.0, and High Score (Plus)
7	Rietveld analysis of diffraction data.

### Last Update

02/05/2022

Researcher | AAD-8890-2019  
 Scopus | 55578066700  
 ORCID ID | <https://orcid.org/0000-0003-1083-7018>  
 Google Scholar | <https://scholar.google.com.au/citations?hl=en&user=fhvWrv8AAAAJ>  
 ReaserchGate | [https://www.researchgate.net/profile/Hani\\_Albetran](https://www.researchgate.net/profile/Hani_Albetran)

