

# **Amir Azam Khan**

**Professor**

School of Chemical & Materials Engineering

**Email:** principal@scme.nust.edu.pk

**Contact:** 518893322

**LinkedIn:**



---

## **About**

Dr. Amir Azam Khan is working as Professor in the School of Chemical & Materials Engineering. Dr. Amir Azam Khan has a PhD in Ceramic Materials And Surface Treatment. Dr. Amir Azam Khan has published 37 research articles & conference papers having a citation count of 385, carried out 2 projects and filed 0 intellectual property.

## **Qualifications**

### **PhD in Ceramic Materials And Surface Treatment**

1991 - 1995

Université de Limoges , France

### **D.A,E in (Ceramic Materials & Surface Treatments)**

1989 - 1991

Université de Limoges , France

### **BE in (Metallurgical Engg & Materials Science)**

1983 - 1987

UET Lahore , Pakistan

## **Experience**

### **Professor**

2024- Present

School of Chemical & Materials Engineering

### **Professor**

2020 - 2009

School of Chemical & Materials Engineering

### **Adjunct Faculty**

2018 - 2017

School of Chemical & Materials Engineering

### **Adjunct Faculty**

2017 - 2020

School of Chemical & Materials Engineering

### **Professor**

2009 - 2018

School of Chemical & Materials Engineering

### **Professor**

2005 - 2020

School of Chemical & Materials Engineering

### **Professor**

2009 - 2020

Universiti Malaysia Sarawak , Malaysia

### **Assoc Prof & Controller of Exa**

2001 - 2005

GIKI, Topi , Swabi, Pakistan

### **Asst Prof**

1996 - 2000

GIKI, Topi , Swabi, Pakistan

### **Post-doc**

1995 - 1996

University of Limoges, France , France

## Research Projects

### National Projects

**4th ASEAN-Pakistan Conference on Materials Science (APCoMS 2025)**

2025

**Funding Agency:** ASEAN Pakistan Collaboration Fund

**Amount:** PKR 24,780,568.00

**Status:** Approved\_inprocess

**Establishment of Centre of Research in Surface Engineering (CoRiSE), NUST, Islamabad**

2024

**Funding Agency:** Ministry of Science and Technology

**Amount:** PKR 1,271,219,000.00

**Status:** Approved\_inprocess

### International Projects

#### Research Articles

**Microstructure Evaluation and Impurities in La Containing Silicon Oxynitrides**

2021

*Abbas Saeed Hakeem Sharafat Ali Thomas Hoche Qasem Ahmed Drmosh Bo Jonson Amir Azam Khan*

*Nanomaterials*, Volume 11(8), Article Number 1896

**Impact Factor:** 5.719 | **Quartile:** 1 | **Citations:** 2

**DOI:** <https://doi.org/10.3390/nano11081896>

**Sliding Friction Behavior of Sintered Ni-Cr Composites with Solid Lubricants**

2021

*Wan Farhana Mohamad Pierre Barroy Olivier Durand Drouhin Clement Puille Abdelilah Lahmar Faiz Ahmad Amir Azam Khan*

*Key Engineering Materials*, Volume 875, Pages 272-279

**Impact Factor:** 0 | **Citations:** 1

**DOI:** <https://doi.org/10.4028/www.scientific.net/KEM.875.272>

**Phase analysis and microstructure study of sintered Ni Cr composites containing MoS<sub>2</sub> , Ag and CaF 2 additives as solid lubricants**

2020

*Wan Farhana Mohamad Amir Azam Khan Faiz Ahmad Abdullah Yassin*

*Journal of Mechanical Engineering and Sciences*, Volume 14, Issue 2, Pages 6548-6556

**Impact Factor:** N/A | **Citations:** 2

**DOI:** <https://doi.org/10.15282/jmes.14.2.2020.02.0514>

**A Feasibility Study of Low-Power Laser Trepanning Drilling of Composite Using ModifiedDVDWriter**

2020

*Nurfairuz Nadirah Affandi Khairul Fikri Tamrin Kaveh Moghadasi Mohd Ridzuan Mohamad Sharip Shahrol Mohamaddan Anamul Hossain Amir Azam Khan*

*International Journal of Integrated Engineering*, Volume 12(3), Pages 187-196

**Impact Factor:** N/A | **Citations:** 2

**DOI:** <https://doi.org/10.30880/ijie.2020.12.03.022>

**Synthesis and Characterization of lead-free piezoelectric (K<sub>0.5</sub>Na<sub>0.5</sub>)NbO<sub>3</sub> produced with improved calcination temperature"**

2020

*Nor Amalina Ahmad Dzetty Soraya Abdul Aziz Norri Hidayawati Mat Daud Rahim Noor Amir Azam Khan*

*Jurnal Teknologi: Sciences & Engineering*, Volume 82(2), Pages 139-147

**Impact Factor:** N/A | **Citations:** 1

**DOI:** <https://doi.org/10.11113/jt.v82.13992>

**The Property Characterization of α-Sialon/Ni Composites Synthesized by Spark Plasma Sintering**

2019

*Adedayo Sheriff Adeniyi Bilal Anjum Ahmed Abbas Saeed Hakeem Faheemuddin Patel Akolade Idris Bakare Anwar Ul-Hamid Amir Azam Khan Muhammad*

*Ali Ehsan Tahir Irfan Khan Anwar Ul-Hamid Amir Azam Khan Muhammad Ali Ehsan Tahir Irfan Khan*

*Nanomaterials*, Volume 9, Issue 12, Article Number 682

**Impact Factor:** 4.324 | **Quartile:** 2 | **Citations:** 19

**DOI:** <https://doi.org/10.3390/nano9121682>

**Development of amino-functionalized silica nanoparticles for efficient and rapid removal of COD from pre-treated palm oil effluent**

2019

*Syed Salman Shafqat Amir Azam Khan Muhammad Nadeem Zafar Mohammed Haji Alhaji Khairuddin Sanaullah Syed Rizwan Shafqat Shahzad Murtaza*

*Suh Cem Pange*

*Journal of Materials Research and Technology*, Volume 8, Issue 1, Pages 385-395

**Impact Factor:** 5.289 | **Quartile:** 1 | **Citations:** 72

**DOI:** <https://doi.org/10.1016/j.jmrt.2018.03.002>

**Removal of Congo Red Dye from Aqueous Solution using Branches of Ficus religiosa**

2018

Amir Azam Khan Syed Salman Shafqat Maria Nosheen Syed Rizwan Shafqat Shahzad Murtaza Muhammad Zubair Muhammad Nadeem Zafar  
Malaysian Applied Biology , Volume 47(1), Pages 103-108

**Impact Factor:** N/A

**DOI:** 0126-8643

**An evaluation of the B4C formation in sintered ZrB2-SiC ceramic composites at 2100 °C**

2018

Dayang Salyani Abang Mahmod Amir Azam Khan Nicolas Glandut Jean-Claude Labbe

*Journal of Alloys and Compounds*, Volume 735, Pages 510-515

**Impact Factor:** 4.175 | **Quartile:** 1 | **Citations:** 5

**DOI:** <https://doi.org/10.1016/j.jallcom.2017.11.170>

**Green Synthesis and Characterization of 3 Carboxycoumarin and Ethylcoumarin-3-carboxylate via Knoevenagel Condensation**

2017

Syed Salman Shafqat Amir Azam Khan Misbahul Ain Khan Shanti Faridah Salleh Mohd Syahmi Jamaludin Pang Suh Cem  
*Asian Journal of Chemistry*, Vol. 29, No 2, Pages 261-266

**Impact Factor:** N/A | **Citations:** 6

**DOI:** [10.14233/ajchem.2017.20142](https://doi.org/10.14233/ajchem.2017.20142)

**The Effect of Thermal Perturbation on a Polymer Material's Tensile Test via Simulation and Experimental Analysis**

2016

M.Q.Sazali M.S.Z.M.Suffian Amir Azam Khan S. Mohamaddan A. Yassin M. Yusof S.A. Rashidi M.H.I. Saad  
*Journal of Telecommunication, Electronic and Computer Engineering*, Volume 8, No. 12, Pages 141-145

**Impact Factor:** N/A

**DOI:** DOI

**Efficient Eco-Friendly Synthesis of Pyrazole Acryloyl Analogues by Amino Acid Catalysis**

2016

Faryal Chaudhry Nadia Asif Syed Salman Shafqat Amir Azam Khan Munawar Ali Munawar Misbahul Ain Khan  
*Synthetic Communications*, Volume 46, Issue 8, Pages 701-709

**Impact Factor:** 1.134 | **Quartile:** 3 | **Citations:** 11

**DOI:** <https://doi.org/10.1080/00397911.2016.1164863>

**Surface oxidation of porous ZrB2-SiC ceramic composites by continuous-wave ytterbium fibre laser**

2015

Dayang Salyani Abang Mahmo Nicolas Glandut Amir Azam Khan Jean-Claude Labbe  
*Applied Surface Science* , Volume 357, Part B, Pages 1982-1990

**Impact Factor:** 3.150 | **Quartile:** 1 | **Citations:** 12

**DOI:** <https://doi.org/10.1016/j.apsusc.2015.09.164>

**N-succinyl chitosan preparation, characterization, properties and biomedical applications: A state of the art review,**

2015

Amir Azam Khan Shahid Bashir Yin Yin Teo S. Ramesh K. Ramesh  
*Reviews in Chemical Engineering*, Volume 31(6), Pages 563-597

**Impact Factor:** 2.163 | **Quartile:** 2 | **Citations:** 66

**DOI:** <https://doi.org/10.1515/revce-2015-0016>

**Synthesis of Arylidene Propanedioic Acids, by Knoevenagel Condensation for use in Ceramic Sol**

2014

Syed Salman Shafqat Misbahul Ain Khan Azham Zulkharnain Sinin Hamdan Andrew Ragai Henry Rigit Amir Azam Khan  
*Asian journal of Chemistry* , Volume 26, Issue 24, Pages 8463-8466

**Impact Factor:** N/A

**DOI:** <https://doi.org/10.14233/ajchem.2014.17749>

**The effect of sound absorption coefficient of particle addition to polyurethane matrix composites**

2014

Amir Azam Khan Yiong Ngee Fe

*Australian Journal of Basic and Applied Sciences*, Volume 8(15), Special 2014, Pages 246-251

**Impact Factor:** N/A

**DOI:** 2309-8414

**Advanced ceramic matrix composites for high energy x-ray generation**

2012

Jean Claude Labbe Amir Azam Khan

*Advances in Natural Sciences: Nanoscience and Nanotechnology*, Volume 2, Article Number 045015

**Impact Factor:** N/A | **Citations:** 1

**DOI:** [10.1088/2043-6262/2/4/045015](https://doi.org/10.1088/2043-6262/2/4/045015)

**Strontium Doped Lead Zirconate Titanate Ceramics: Study of Calcination and Sintering Process to Improve Piezo Effect**

2011

Muhammad Shoaib Amir Azam Khan Muhammad Khalid

<b>Influence of Nano-Alumina and Mullite on the Sintering Behavior of Hotpressed Silicon Carbide</b>	2008
Shahid Rasul Daniel Tetard J. C. Labbe Amir Azam Khan	
<i>NUST Journal of Engineering Sciences</i> , Volume 1, Issue 1, Pages 91-96	
<b>Impact Factor:</b> N/A	
<b>DOI:</b> <a href="https://doi.org/10.24949/njes.v1i1.63">https://doi.org/10.24949/njes.v1i1.63</a>	
<b>Influence of substrate surface conditions on the plasma sprayed ceramic and metallic particles flattening</b>	2005
A.A.Syed A.Denoirjean B.Hannoyer P.Fauchais J.C.Labbe Amir Azam Khan P. Denoirjean	
<i>Surface and Coatings Technology</i> , Volume 200, Issue 7, Pages 2317-2331	
<b>Impact Factor:</b> 1.646   <b>Quartile:</b> 1   <b>Citations:</b> 62	
<b>DOI:</b> <a href="https://doi.org/10.1016/j.surfcoat.2005.01.014">https://doi.org/10.1016/j.surfcoat.2005.01.014</a>	
<b>Effect of oxide additives and particle size on stabilization of treated commercial zirconia</b>	2001
Maham Yasmeen Syed Asif Ansar Thierry Joyeux Jean Claude Labbe Amir Azam Khan	
<i>Journal of Materials Engineering and Performance</i> , Volume 10, Pages 542-547	
<b>Impact Factor:</b> 0.268   <b>Quartile:</b> 4   <b>Citations:</b> 1	
<b>DOI:</b> <a href="https://doi.org/10.1361/105994901770344683">https://doi.org/10.1361/105994901770344683</a>	
<b>Processing and microstructure of alumina-based composites</b>	1999
M. Mujahid M.I. Qureshi M. Islam Amir Azam Khan	
<i>Journal of Materials Engineering and Performance</i> , Volume 8(4), Pages 496-500	
<b>Impact Factor:</b> 0.232   <b>Quartile:</b> 3   <b>Citations:</b> 3	
<b>DOI:</b> <a href="https://doi.org/10.1361/10599499770346828">https://doi.org/10.1361/10599499770346828</a>	
<b>Effect of heating cycle on the structure of Ag films deposited over porcelain substrates</b>	1998
J.C. Labbe Amir Azam Khan	
<i>Journal of Materials Engineering and Performance</i> , Volume 7, Issue 6, Pages 757-760	
<b>Impact Factor:</b> 0.118   <b>Quartile:</b> 4   <b>Citations:</b> 1	
<b>DOI:</b> <a href="https://doi.org/10.1361/105994998770347323">https://doi.org/10.1361/105994998770347323</a>	
<b>Aluminium nitride-molybdenum ceramic matrix composites. Influence of molybdenum addition on electrical, mechanical and thermal properties</b>	1997
Jean Claude Labbe Amir Azam Khan	
<i>Journal of the European Ceramic Society</i> , Volume 17, Issues 15-16, Pages 1885-1890	
<b>Impact Factor:</b> 0.913   <b>Quartile:</b> 1   <b>Citations:</b> 38	
<b>DOI:</b> <a href="https://doi.org/10.1016/S0955-2219(97)00071-X">https://doi.org/10.1016/S0955-2219(97)00071-X</a>	
<b>Molybdenum ceramic matrix composites possessing high thermal shock resistance</b>	1997
Jean Claud Labbe Amir Azam Khan	
<i>Materials Science and Engineering A</i> , Volume 230, Issues 1-2, Pages 33-38	
<b>Impact Factor:</b> 0.842   <b>Quartile:</b> 2	
<b>DOI:</b> <a href="http://dx.doi.org/10.1016/S0921-5093(97)00012-9">http://dx.doi.org/10.1016/S0921-5093(97)00012-9</a>	
<b>Aluminium nitride–molybdenum ceramic matrix composites: influence of molybdenum concentration on the mechanical properties</b>	1997
Amir Azam Khan J.C. Labbe	
<i>Journal of Materials Science</i> , Volume 32, Pages 3829-3833	
<b>Impact Factor:</b> 0.669   <b>Quartile:</b> 2   <b>Citations:</b> 25	
<b>DOI:</b> <a href="https://doi.org/10.1023/A:1018636025842">https://doi.org/10.1023/A:1018636025842</a>	
<b>Molybdenum and tungsten coatings for X. Ray targets, obtained through Low Pressure Plasma Spraying process</b>	1997
Amir Azam Khan J. C. Labbe A. Grimaud P. Fauchais	
<i>Journal of Thermal Spray Technology</i> , Volume 6, Issue 2, Pages 228-234	
<b>Impact Factor:</b> 0.800   <b>Quartile:</b> 2   <b>Citations:</b> 13	
<b>DOI:</b> <a href="https://doi.org/10.1007/s11666-997-0017-5">10.1007/s11666-997-0017-5</a>	
<b>Influence of molybdenum on thermal properties of CMCs</b>	1996
J. C. Labbe Amir Azam Khan	
<i>American Ceramic Society Bulletin</i> , Volume 75(8), Pages 52-56	

**Impact Factor:** N/A

**DOI:** [https://doi.org/10.1016/S0921-5093\(97\)012-9](https://doi.org/10.1016/S0921-5093(97)012-9)

## Aluminium Nitride-Molybdenum Ceramic Matrix Composites: Characterization of Ceramic-Metal Interface

1996

Amir Azam Khan J. C. Labbe

*Journal of the European ceramic Society*, Volume 16, Issue 7, Pages 739-744

**Impact Factor:** N/A | **Citations:** 33

**DOI:** 10.1016/0955-2219(95)00203-0

## Conference Proceedings

### Physical and Mechanical Properties of Ni-Cr based composites with addition of solid lubricants produced through powder metallurgy process

2016

Mohamad W.F. Amir Azam Khan Ahmad F Abdullah Yassin

*9th International UNIMAS-STEM Engineering Conference, 26-27 October, 2016 Kuching, Malaysia*, res.country(157,)

**Citations:** N/A

**DOI:** 10.1051/matecconf/20178702011

### Environmentally Benign Syntheses and Characterization of 4-Aryldihydropyrimidin-2 (1H)-ones

2016

Syed Salman Shafqat Amir Azam Khan Misbahul Ain Khan Nicholas Kuan Hoo Tien Mohd Syahmi Jamaludin Pang Suh Cem

*9th International UNIMAS-STEM Engineering Conference*, res.country(157,)

**Citations:** N/A

**DOI:** 10.1051/ENCON 2016 MATEC Web of Conferences matecconf/20178702025

### Laser surface treatment of porous ceramic substrate for application in solid oxide fuel cells

2016

Mahmod D.S.A. Amir Azam Khan Munot M.A. Glandut N. Labbe J.C.

*14th International Symposium on Advanced Materials (ISAM2015)*, res.country(282,)

**Citations:** N/A

**DOI:** 10.1088/1757-899X/146/1/012002

### Effect of mold designs on molten metal behaviour in high-pressure die casting

2016

M D Ibrahim M R A Rahman A A Khan M R Mohamad [ M S Z M Suffian Y S Yunos L K Wong M Z Mohtar

*15th Asian Congress of Fluid Mechanics*, res.country(157,)

**Citations:** N/A

**DOI:** 10.1088/1742-6596/822/1/012029

### Synthesis and characterization of heterocyclic-ORMOCERS composites through Sol-gel process: A

2014

#### Review

Amir Azam Khan Syed Salman Shafqat Sinin Hamdan Sinin Hamdan Nicholas Kuan Hoo Tien Shanti Faridah Saleh

*5th International Conference on Science & Technology: Applications in Industry & Education (ICSTIE 2014)*, res.country(157,)

**Citations:** N/A

**DOI:** -

### Surface engineering glass-metal coatings designed for induction heating of ceramic components

2013

Amir Azam Khan J.C. Labbe

*13th International Symposium on Advanced Materials (ISAM2013)*, res.country(282,)

**Citations:** N/A

**DOI:** 10.1088/1757-899X/60/1/012017

### Study of Heat Treatment Cycle of Aluminum Magnesium (AA6061) Heat Treatable Alloys for Structural Applications

2011

Amir Azam Khan S. A/L GUNASEKHARAN

*7th International Conference on Steel & Aluminum Structures, 13-15 July, 2011, Kuching*, res.country(157,)

**Citations:** N/A

**DOI:** 10.3850/978-981-08-9247-0\_rp012-icsas11

### Effect of Silica and Magnesia addition on the densification and structure of sintered alumina.

1999

Amir Azam Khan M.Islam

*6th Int. Symp. On Advanced Materials*, res.country(282,)

**Citations:** N/A

**DOI:** -