



Email: [aalahmed@kfupm.edu.sa](mailto:aalahmed@kfupm.edu.sa)  
 Contact:  
 Office: +966138602533  
 Mobile: +966 53 4405107

## Dr. Amir Al-Ahmed

MRSC

Research Scientist II/ Associate Professor

Interdisciplinary Research Center for Renewable Energy and Power Systems (IRC-REPS)

King Fahd University of Petroleum & Minerals, Saudi Arabia

### Executive Summary

More than 20 years of research experience on energy materials for renewable energy conversion and storage, student supervision, advising, project management and editing (Book and Journal).

At present, working on multidisciplinary projects related to solar cells, PV characterization, and energy storage.

### Education

- ❑ PhD Applied chemistry (AMU, India)
- ❑ MS Chemistry (AMU, India)
- ❑ BSc Chemistry (AMU, India)

## Distinguished Projects

S.N O.	Project Number/ Funding Authority	Project Title	Status/Total Value	Role
1	10-ENE1374-04/ NSTIP	Modified Composite Membranes and alloy catalyst for PEM/DMFC.	Completed / 1.998 M	COI
2	10-ADV1367-04/ NSTIP	Development of YSZ-Based Porous Tubular Anode Support and Dense Single Grain Electrolyte Layer For Solid Oxide Fuel Cell.	Completed / 1.94 M	COI
3	AK-11-126/ KACST	Nanocrystalline Composite Oxides Membranes for Hydrogen Gas Separation and its Hydrothermal Stability. (final Report Submitted)	Completed / 0.89 M	COI
4	CENT2203 (6600011900)/ SAUDI ARAMCO	Development of Nanostructured Electrode for Brine Electrolysis to Generate High Flow Rate of Hydrogen Gas	Completed / 2.362 M	COI
5	12-ENE3204-04/ NSTIP	Solar harvesting of surface modified lead chalcogenide heterostructures.	Completed / 1.984 M	PI
6	IN161025/ DSR, KFUPM	MWCNT grafted long chain fatty acids/fatty alcohols: A Novel Approach to have Higher Thermal Conductivity in Organic PCMs	Completed / 0.132 M	PI
7	IN161036/ DSR, KFUPM	Preparation and Evaluation of Synthetic Polymeric Composite Membranes for the Removal of Metal ions from Waste Water	Completed / 0.192 M	COI
8	15-ENE4617-04/ NSTIP	The Development of Direct Ternary Nanocrystal Assemblies for Hybrid Photovoltaic Devices	Ongoing/ 0.708 M	PI
9	DF191048/ DSR, KFUPM	Novel double layer atmospheric pressure chemical vapor deposition method for all inorganic perovskite synthesis: Development of PV technology stable against harsh weather conditions	Ongoing / 0.299 M	PI
10	INRE2017/ IRC-REPS, KFUPM	Effect of High Outdoor Temperature on the PV modules with Advance Internal Architecture	Ongoing / 0.14 M	PI

## Research Summary

- Number of Published Papers: 60+
- Citations: 1700+
- H-Index: 22
- Number of Patents: 8 (US)
- Books (Edited): 12 (Springer, Elsevier, TTP)
- Chief Editor “Nano Hybrids and Composites”, Publisher Trans Tech, Switzerland.  
(<http://www.ttp.net/2297-3370.html>)

## Award and Recognitions

- NRF postdoctoral fellowship, South Africa
- Claude Leon Foundation, Postdoctoral fellowship, South Africa
- KFUPM postdoctoral fellowship, Saudi Arabia
- Book publishing award from the President of KFUPM

## Skills and Expertise

- Solar cell fabrication, characterization
- PV module evolution
- Utility scale battery evolution
- Dust repellent coating for PV
- Electrochemistry
- Polymer composites