

## Dr. Samer Jasim Mahmood Algodhi

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### PROFILE

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A Researcher and lecturer at **Al-Nahrain University** holding a PhD from the **University of Nottingham-UK** in mechanical Engineering. Five journal papers and two conferences papers were published during the PhD research.

The research was focusing on the generation and characterisation of Nano-structure coating using Electrical discharge process.

I also interested in the area of manufacturing process, in particular surface modification, laser surface processing, additive manufacturing, machining, welding and casting process.

The objective is to work in complex and challenging academic environment that demands my research and academic experience supported by my industrial experience.

### EDUCATION

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- 2014 – 2018      **PhD 'Characterisation, modelling and tribological investigations of nano-structured TiC-based electrical discharge coatings'**  
University of Nottingham, Faculty of Engineering / Mechanical Engineering Dept.  
Supervisors: Professor Paul D Brown – Professor of Materials Characterisation.  
Professor Adam Clare – Professor of Manufacturing process
- 2006 – 2009      **MSc in Manufacturing engineering**  
**'The Influence of Tool Geometry of Friction Stir Weld on Mechanical Properties and Microstructure of 2218-T72 Aluminum Alloy'**  
Department of mechanical Engineering.  
University of Baghdad, Iraq - Baghdad  
Supervisor: Professor Qasim Muhammad Dos.
- 1999 – 2003      **BSc in Production engineering**  
Department of Production Engineering and Metallurgy.  
University of Technology , Iraq - Baghdad  
Graduation Ranking: **(2rd) out of (74) graduates**  
FY Project: Design and manufacturing a deep drawing die.

### EMPLOYMENT

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Period	Details
2004- Now 2017-2018	<b>Al-Nahrain University – Collage of engineering</b> Teaching Assistant for several labs (such as metallurgy and strength of materials for undergraduate students) University of Nottingham (during PhD thesis writing up for experience gaining)

## PUBLICATIONS

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- **Samer J. Algodí,** James W. Murray, Paul D. Brown, Adam T. Clare. **"Wear performance of TiC/Fe cermet electrical discharge coatings."** *Wear* 402 (2018): 109-123.
- **Algodí, Samer J.,** Adam T. Clare, and Paul D. Brown. **"Modelling of single spark interactions during electrical discharge coating."** *Journal of Materials Processing Technology* 252 (2018): 760-772.
- **Samer J Algodí,** James W Murray, Michael W Fay, Adam T Clare, Paul D Brown. **"Electrical discharge coating of nanostructured TiC-Fe cermets on 304 stainless steel."** *Surface and Coatings Technology* 307 (2016): 639-649.
- J.W. Murray, **Samer. J. Algodí,** M.W. Fay, P.D. Brown, A.T. Clare. **"Formation mechanism of electrical discharge TiC-Fe composite coatings."** *Journal of Materials Processing Technology* 243 (2017): 143-151
- J.W.Murray, R.B.Cook, N.Senin, **S.J.Algodí,** A.T.Clare " Defect-free TiC/Si multi-layer electrical discharge coatings" *Materials & Design* 155 (2018): 352-365
- **Samer Jasim Mahmood.** **"Comparative Investigation of Friction Stir Welding and Tungsten Inert Gas of 6061T651 Aluminum Alloy on Mechanical Property and Microstructure."** *Eng. & Tech. Journal* 31 (2013): 1151-1165.
- Qasim M. Doos, **Samer J. Mahmood.** **"THE INFLUENCE OF TOOL GEOMETRY OF FRICTION STIR WELDS ON MECHANICAL PROPERTIES AND MICROSTRUCTURE OF 2218-T72 ALUMINUM ALLOY."** *Journal of Engineering* 17 (2011): 1242-1259. (Journal of Engineering Baghdad University)
- Ayad M. Takhakh, **samer J. AL-Jodi,** Mohamed A. Al-khateeb **"EFFECT OF TOOL SHOULDER DIAMETER ON THE MECHANICAL PROPERTIES OF 1200 ALUMINUM FRICTION STIR SPOT WELDING"** *Journal of Engineering* 17 (2011): 1517-1523. (Journal of Engineering Baghdad University)

## CONFERENCES

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2018	Bilbao, Spain	19th CIRP Conference on Electro Physical and Chemical Machining Oral presentation, Poster presentation and conference paper <i>"Modelling and Characterisation of Electrical Discharge TiC-Fe Cermet Coatings"</i>
2015	Manchester, UK	EMAG (Poster Presentation and conference paper) <i>"Characterisation of TiC layers deposited using an electrical discharge coating process"</i>

## LIST OF ENGLISH LANGUAGE COURSES

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Period	Details	
12/8/2013 - 28/2/2014	Intensive English Upper Intermediate	ILS English (Nottingham)
2/4/2014 – 19/6/2014	Preessional English for Academic Purposes	Centre for English language Education (University of Nottingham)