

## Curriculum Vitae



### **Associate Professor Ooi Chui Ping**

Head, Biomedical Engineering Programme  
School of Science & Technology

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### **Education Qualifications**

2000	Ph.D, University of Cambridge, UK
1997	M.Sc. and B.Sc (Hons), University of Malaya

### **Academic and Professional Experience**

2015 – Present	Associate Professor and Head of Programme, Paramedicine and Emergency Response Minor
2009 – Present	Associate Professor and Head of Programme, Biomedical Engineering
2018 – 2019	External examiner for Diploma in Biomedical Engineering, Temasek Polytechnic
2005 – 2008	Assistant Professor, School of Chemical & Biomedical Engineering, Nanyang Technological University
2000 – 2004	Assistant Professor, School of Materials Engineering, Nanyang Technological University
1997 - 1999	Graduate Tutor, University of Cambridge, UK

### **Memberships and Professional Activities**

- President, Institute of Materials (East Asia), Singapore
- Student Advisory Board, Biomedical Engineering Society, Singapore
- Chartered Engineer, UK
- Member of Institute of Materials, Minerals and Mining, East Asia & UK

### **Research Interests**

- Application of artificial intelligence in medicine / healthcare
- Biomaterials development and characterization

## **Selected Publications**

### **Book Chapters:**

- H. H. Lau, C. P. Ooi, M. V. Kiryukhin. Biodegradable Protein-Tannic Acid Multilayers. 2018. Chapter 5, PP 141 – 167. In: M. C. Wythers (ed) *Advances in Materials Science Research Vol. 33*. Nova Science Publishers. ISBN: 978-1-53614-314-0 (eBook) ISBN: 978-1-53614-313-3 (Hardcover)
- Gan Seng Neon, Aishah Mohd Jelani, Ooi Chui Ping, Trinuclear oxo-centered chromium (III) carboxylate complexes as Ziegler-Natta catalysts for ethylene polymerization, *Progress and Development of Catalytic Olefin Polymerisation*, Technology and Education Publishers, 2000; 25 – 32. ISBN: 978-4-90783-701-3

### **Selected international Refereed Journal Papers:**

- Hui Wen Loh, Chui Ping Ooi, Shu Lih Oh, Prabal Datta Barua, Yi Ren Tan, Filippo Molinari, Sonja March, U Rajendra Acharya, Daniel Shuen Sheng Fung, Deep neural network technique for automated detection of ADHD and CD using ECG signal, *Computer Methods and Programs in Biomedicine*, Vol 241, Nov 2023, 107775. doi: 10.1016/j.cmpb.2023.107775.
- Hui Wen Loh, Chui Ping Ooi, Silvia Seoni, Prabal Datta Barua, Filippo Molinari, U Rajendra Acharya, Application of explainable artificial intelligence for healthcare: A systematic review of the last decade (2011 – 2021), *Computer Methods and Programs in Biomedicine*, Vol 226, 107161, November 2022, <https://doi.org/10.1016/j.cmpb.2022.107161>
- H.W. Loh, C.P. Ooi, P.D. Barua, E.E. Palmer, F. Molinari and U.R. Acharya, “Automated detection of ADHD: Current trends and future perspective”, *Computers in Biology and Medicine*, Vol.1465, July 2022, 105525. <https://doi.org/10.1016/j.compbimed.2022.105525>
- H. T. Tor, C. P. Ooi, N. S. J. Lim-Ashworth, J. E. W. Koh, V. Jahmunah, S. L. Oh, U. R. Acharya, D. S. S. Fung, Automated detection of conduct disorder and attention deficit hyperactivity disorder using decomposition and nonlinear techniques with EEG signals, *Computer Methods and Programs in Biomedicine*, 200 (March 2021), 105941. <https://doi.org/10.1016/j.cmpb.2021.105941>
- Huiwen Loh, Chui Ping Ooi, Emirah Aydemir, Turker Tuncer, Sengul Dogan, U Rajendra Acharya, Decision support system for major depression detection using spectrogram and convolution neural network with EEG signals, *Expert Systems*, 13 July 2021, 39(2):e12773, <https://doi.org/10.1111/exsy.12773>
- H. W. Loh, C. P. Ooi, V. Jamunah, S. L. Oh, O. Faust, A. Gertych, U. R. Acharya, Automated detection of sleep stages using deep learning techniques: A systematic review of the last decade (2010-2020), *Applied Sciences*, 2020, 10(24), 8963. DOI: 10.3390/app10248963
- S. L. Oh, V. Jahmunah, C. P. Ooi, R.S. Tan, E. J Ciaccio, T. Yamakawa, M. Tanabe, M. Kobayashi, U. R. Acharya, Classification of heart sound signals using a novel deep WaveNet model, *Computer Methods and Programs in Biomedicine*, 2020, 196, 105604. DOI: 10.1016/j.cmpb.2020.105604

- H. H. Lau, N. L. Yakovlev, C. P. Ooi, M. V. Kiryukhin, Adsorption kinetics of tannic acid onto albumin-terminated multilayer thin films, *Colloid and Polymer Science*, 2019, Vol. 297, Issue 3, pp 417-422.  
DOI: 10.1007/s00396-018-4426-4
- Y. Li, J. Ho, C. P. Ooi, Antibacterial Efficacy and Cytotoxicity Studies of Copper(II) and Titanium(IV) Substituted Hydroxyapatite, *Material Science and Engineering C*, 2010, Vol. 30, pp.1137- 1144
- S. C. J. Loo, C. P. Ooi, FYC Boey, Degradation of poly(lactide-co-glycolide) (PLGA) and poly(L-lactide) (PLLA) by electron beam irradiation, *Biomaterials*; 2005; 26, 12, 1359-1367.

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