CURRICULAM VIATE

PERSONAL INFORMATION

Khaled Goher BEng MEng PhD CEng MIMechE MIET PGCHE FHEA MCA

Associate Professor

Department of Mechanical and Industrial Engineering – Sultan Qaboos University, Oman

Permananent Home Address: Memorial Gradens, Branston, Lincoln LN4 1FR, United Kingdom

Citizenship: British Citizen Email (personal): k.m.goher@gmail.com

Scopus ID: 26325266900 - https://www.scopus.com/authid/detail.uri?authorId=26325266900

LinkedIn: https://www.linkedin.com/in/khaled-goher-82907346/

Google Scholar: https://scholar.google.com/citations?user=xJi8qXcAAAAJ&hl=en

Email (work): k.goher@squ.edu.om

BIOGRAPHY

I focus on collaborating with industries and communities in my research to design and develop sustainable engineering solutions for the benefit of both. My areas of expertise include dynamics and control, mechanical systems, mechatronics system design, soft robotics, and the use of rapid manufacturing technologies in the agriculture, healthcare, and food manufacturing sectors. With over 20 years of experience in academia and leadership roles at leading institutions in the UK, NZ, and the Middle East, I strive to provide students with career-focused education that gives them a "glimpse of their future" and helps them develop the engineering skills and innovative mindset needed to support businesses and organizations. This approach has been successful in bridging the gap between employer needs and student skills, improving graduates' employability, and easing their transition from higher education to the workforce.

EMPLOYEMENT HISTORY

08/23- date	Associate Professor, Founder and the Soft Robotics Laboratory, Department Mechanical and Industrial Engineering, Sultan Qaboos University, Oman
02/22- 06/24	<u>Deputy Director of UG Mechanical Engineering programme, and Lead of Year 3</u> <u>Mechanical Engineering</u> , Mechanical, Materials and Manufacturing Engineering Department, <u>University of Nottingham (UK)</u>
02/22- 06/24	<u>Associate Professor</u> , Mechanical, Materials and Manufacturing Engineering Department, <u>University of Nottingham (UK)</u>
02/19 – 02/22	Founding Programme Leader, BEng Biomedical Engineering, <u>University of Lincoln</u> (UK)
07/18 - 02/22	<u>Academic Director and Founding Lead</u> , Bio-robotics and Medical Technologies Laboratory, <u>University of Lincoln (UK)</u>
10/18 - 02/22	<u>Deputy Director of Teaching and Learning</u> , School of Engineering, <u>University of Lincoln (UK)</u>

10/18 - 02/22	<u>Programme Leader</u> , Mechanical Engineering, <u>University of Lincoln (UK)</u>
07/18 - 02/22	Senior Lecturer in Robotics and Automation, University of Lincoln (UK)
07/17 - 07/18	Lecturer in Biomedical Engineering, Aston University (UK)
3/15 – 07/17	Lecturer in Robotics and Autonomous Systems, Lincoln University (NZ)
9/10 – 1/15	<u>Assistant Professor in Dynamics and Control,</u> Mechanical Engineering, <u>Sultan Qaboos University, Oman</u>
9/06 - 7/10	Researcher and Teaching Assistant, The University of Sheffield, UK
10/99 - 8/06	Lecturer in Mechanical Engineering, Egypt
7/11 – 09/15	Business Development Manager, Computek International Corporation, Egypt
7/97 – 9/99	Electromechanical Engineer, Egypt

PROFESSIONAL WORK and SERVICES

9/10 - present	<u>Educational and Technical Consultant</u> – number of international companies in NZ, UK, and Egypt
9/17 - present	<u>Health Advisory Board</u> - Ambionics Itd, UK
7/14 - present	Deputy Treasurer, Chair of Management Team, Projects and Chapters Coordinator, Cross-referencing and Editor of Online Publications - CLAWAR

- Organizing detailed logistics for the CLAWAR projects
- Launching new CLAWAR chapters throughout various regions
- Sharing in the organization of the annual CLAWAR conferences and workshops

6/14 - present BSI Standards Committee Member, the British Standards Institute (UK)

- AMT/00/02 Robots and Robotic Devices
- TC/199 Safety of Machines

Association (UK Charity)

- TC/184/SC2 Robots and Robotic Devices
- BS 8611 Robots and robotic devices: ethical design and robots and robotic systems.

EDUCATION and PROFESSIONAL CERTIFICATION

5/2020 – present	CEng - Charter Engineer — The Engineering Council (UK)
8/2018 - present	Fellow (FHEA) - Higher Education Academy (UK)
03/15 – 12/15	PgCertEd - Auckland University of Technology, NZ
7/12	PRINCE2 Foundation - Project Management, APMG – International, UK
1/12 – 1/13	PgCert - Bionanotechnology - Kaiserslautern University, Germany
9/06 – 7/10	PhD - Control Engineering, University of Sheffield, UK
10/03 - 6/05	MSc - Mechanical Engineering, Egypt

ACADEMIC ADMINSTRIATION EXPERIENCE

Committee	Role	Duties
College of Engineering, Sultan Qaboos University (Oman)	Member, College Postgraduate Studies and Research (DPSR) Committee	Contributing to the college research agenda, research directions and strategic research plans.
Mechanical and Industrial Engineering Department Sultan Qaboos University (Oman)	Member, Department Academic Programs Modernization Committee (DAPMC)	Various duties to modernise the programme contents, delivery and facilities
Mechanical and Industrial Engineering Department Sultan Qaboos University (Oman)	Member, Department Recruitment Committee	Responsible for recruitments in the dynamic and control group
Mechanical and Industrial Engineering Department Sultan Qaboos University (Oman)	Member, Department Postgraduate Studies and Research (DPSR) Committee	Active member in the area of PGR studies and research, department research agenda
Mechanical Engineering, <u>University of Nottingham</u> (<u>UK)</u>	Associate HoD	Supporting number of staff in the department with delegated responsibilities from the HoD and Deputy HoD including <u>appraisal</u> , <u>professional development</u> , <u>mentoring</u> etc.
Mechanical Engineering, University of Nottingham (UK)	Deputy Director of UG programme	Leadership and operational duties of the programme and supporting the programme director in directing and manging the programme.
Mechanical Engineering, University of Nottingham (UK)	Year Lead – MEng Year	The first <u>point of contact with students' body</u> and responding to students' enquiries related to their study subjects, enrolment, registration, modules choices, subject challenges, etc.
Biomedical Engineering, University of Lincoln (UK)	Founding Programme Leader	I am the founder of the new Biomedical Engineering programme. Proposing and <u>developing</u> a new BEng programme of Biomedical Engineering. I formed a <u>healthcare advisory board</u> , looking after the <u>validation process</u> and accreditation by <u>IMechE/IET</u> , <u>leading programme development</u> ,

collaborating with <u>industrial partners</u>, seeking students' placement.

Mechanical Engineering, University of Lincoln (UK) Programme Leader

<u>Leading</u>, <u>Moderation</u> and <u>Review</u> of the <u>undergraduate programme</u> and being involved with the <u>accreditation</u> process with the <u>IET</u> and <u>IMechE</u> institutes.

Biomedical Engineering, Aston University (UK) Member

Review of the <u>undergraduate biomedical</u> <u>engineering programme</u> and being involved with the accreditation process with the IMEng institute.

Undergraduate Degree Program Review and Development Lincoln University (NZ) Coordinator

Review of the undergraduate degree for AgriTec major with colleagues from the department. I reviewed number of similar agriculture technology programs in various international institutions. Part of my contribution included proposing new courses in Agriculture Machinery, Basic Mechanics for Agriculture and Basic Mathematics. I also led in the discussion for the new program of the 180 credits Master of Informatics. I offered three courses as electives for MInfo the program: Bio-Inspired/Nature-Inspired Soft Computing and Optimisation; Bioinformatics; and Fuzzy Logic and Soft Computing.

Seminar Committee Lincoln University (NZ)

Coordinator

I organised the 1st seminar in Robotics in collaboration with University of Canterbury.

I also organised and co-chaired the 1st CLAWAR and IEEE RAS NZ South workshop on robotics and automation in June 2016. The workshop featured presentations from academics and industry. The workshop has been sponsored by UoC, Lincoln, CLAWAR Association and IEEE RAS NZ South.

Mechatronics Program

<u>Sultan Qaboos University</u>

(Oman)

Coordinator, ABET
Curriculum and
Accreditation

<u>Preparing course files, compiling and final editing of self-study reports</u>, identifying assessment courses and tools, performance indicators for assessment, learning outcomes and rubrics for measurements.

Mechatronics Program

<u>Sultan Qaboos University</u>

<u>(Oman)</u>

Secretary, Program
Steering Committee

Taking minutes, follow up with actions, sharing in the monthly regular meetings and discussing arising matters including program management, lab facilities, degree plans, new course offerings, enrolments, final year projects etc.

Mechanical and Industrial Engineering Coordinator, Final Year Project Call for new projects from faculty, announcing project topics to students, project allocation for

Department Sultan Qaboos University (Oman)		students, ensuring the implementation of departmental policies on supervision, submission, grading and marking, supporting students with seminars, resolving any conflicts may arise, compiling final year project policy and guidelines.
Mechanical and Industrial Engineering Department Sultan Qaboos University (Oman)	Member, Recruitment	Sharing in screening of applications, phone call, skype and face-to-face interviews, final decisions.
Mechanical and Industrial Engineering Department Sultan Qaboos University (Oman)	Member, ABET Accreditation	Preparing course files, compiling and final editing of self-study reports, identifying assessment courses and tools, performance indicators for assessment, learning outcomes and rubrics for measurements.
Mechanical and Industrial Engineering Department Sultan Qaboos University (Oman)	Chair, Senior Seminar	Organising seminars within the department, recruiting potential presenters
Mechanical and Industrial Engineering Department Sultan Qaboos University (Oman)	Member, Lab/HSE	Lab facilities, new purchases, health, and safety regulations in labs.
College of Engineering Sultan Qaboos University (Oman)	Coordinator, Biomedical Engineering Programme	Working with a team or representatives from various departments to compile a <u>degree plan for a new program in biomedical engineering</u> .
College of Engineering Sultan Qaboos University (Oman)	Coordinator, Training and Community Services	Management of students training nationally and internationally, working with various institution for student's exchange, co-organisation of training events for staff.
College of Engineering Sultan Qaboos University (Oman)	Member, College Publication/Web	Compiling, editing, and publishing the annual College report, online publications, newsletters and videos
College of Engineering Sultan Qaboos University (Oman)	Coordinator, Textbooks	<u>Coordinating textbooks requests</u> by faculty and organising purchase this with the bookstore and library

RESEARCH GRANTS/BIDS

Project Title	Amount (USD)	Funding Agency	Role
Al-enhanced Soft Robotic Actuators for Sustainable Energy Consumption in Tele- Rehabilitation for Post Stroke Patients in Oman (2025-2026)	\$40,092 (RO15,600)	Ministry of Higher Education, Research and Innovation, Oman (Block Fund) – External Grant	PI
Soft Robotic Actuators with Variable Stiffness for Stroke Patients: A Feasibility Study (2024)	\$7,710 (RO3,000)	Deanship of Research, Sultan Qaboos University	PI
Investigation into Mode Localization of Electrically Actuated Shallow Micro Arches for Potential Sensing (gas, viruses, etc) Applications (2024-2026)	\$15,652 (RO6090)	Sultan Qaboos University (Internal Grant)	PI
Optimization of Energy Management in DC Microgrids with Hydrogen Systems (2025-2027)	\$14,649 (RO5,700)	Sultan Qaboos University (Internal Grant)	CO- PI
Design, Manufacture and Test a Posterior Leaf Spring Ankle-Foot Orthosis	\$7.5k	EPSRC (EPSRC Vacation Research Internship)	PI
A Rehabilitation and Adaptable Exoskeleton using Material Jamming	\$120K	British Council (Newton Fund)	PI
Dynamic Modelling and Control of Soft-Rigid Actuator for Assistive Technologies	\$120K	British Council (Newton Fund)	PI
Development of Children's Biomimetic Adjustable and Adaptive Myoprosthetic Hand with Sensory Feedback	\$120K	British Council (Newton Fund)	PI
EPSRC Capital Equipment, "Lincoln Care Robotics Lab"	\$312K	Engineering and Physical Sciences Research Council (EPSRC)	Co-I
Portable Scanner for Brain Imaging	\$360k	Rosetrees Trust Award 2021	CO-I
Biomarker linked Artificial Intelligence powered Motion (BioAIM) analysis in prediction, prevention, and early intervention of musculoskeletal (MSK) disorders	\$360k	Rosetrees Trust Award 2021	CO-I
Biorobotics and Medical Technologies Lab	\$70K	EPSRC Capital Equipment	PI
Internet Business of Wearable Exoskeletons	\$120k	Innovate UK Healthy Ageing Trailblazers - Stage 1''	PI
A Machine to Enhance Manual Picking in Muddy Soil and Steep Terrains	\$80k	BBSRC Seed Funding + 50% from industry	PI
Needs Assessment and User-Centred Design of Walking Devices for Fall Prevention from Older People' Perspective.	\$120k	Abbeyfield Charity	PI
3D Printed Custom Jigs for Orthopaedic Alignment Surgery	\$12K	European Regional Development Fund (ERDF)	PI

Automated Solutions for Stitching Coir Matts	\$10K	European Regional Development Fund (ERDF)	PI
Design and Development of Closing Mechanisms for Polyurethanes Manufacturing	\$10K	European Regional Development Fund (ERDF)	PI
Pump Priming Grant	\$7K	University of Lincoln, UK	
Start-up Fund (Assistive Technology Research)	\$13K	Aston University, UK	PI
Research Portfolio Funding Support	\$20K	Lincoln University, NZ	PI
Design and Realization of Exoskeleton Arms	\$4K	The Research Council, Oman	PI
Design and Realization of Exoskeleton for Disabled	\$4K	The Research Council, Oman	PI
Design and Realization of a Rehabilitation Walker with a Sit-to Stand Assistance Facility	\$4K	The Research Council, Oman	PI
Development of an Environmentally Adapted Wheelchair (Internal funding scheme)	\$26K	Sultan Qaboos University, Oman	PI

POSTGRADUATE SUPERVISION

PhD

- A Rehabilitation and Adaptable Exoskeleton using Material Jamming
- Dynamic, Modelling and Control of Assistive Robotic Device for Elderly Mobility and Rehabilitation
- Development of Children's Biomimetic Adjustable and Adaptive Myoelectric Prosthetic Hand with Sensory Feedback
- Design, Modeling and Control of a Robotic Walker for Fall Prevention
- Code of Ethics for Design, Deployment, Use and Disposal of Service Robots
- Smart Wearable Solutions for Fall Prevention in Elderly
- Smart Vision-Based Improving for Lower-Limb Robotic Exoskeletons

MSc

- Prosthetic Arm with Soft Fingers for Toddlers
- Design, Modelling and Control of a Portable Leg Rehabilitation System
- Modelling and Control of a Two-Wheeled Machine for Industrial Applications

SUPERVISED FINAL-YEAR SENIOR DESIGN PROJECTS (Research-related)

- Upper limb adaptive soft-rigid socket
- Lasagne Soft Gipper
- Soft Gripper for Pancake
- Hybrid Soft-Rigid Gripper for Berries

- Lower Prosthetic Soft-Rigid Socket for Children
- Airbag Vest for Fall Detection and Prevention
- Conceptual Designs for Disposable Assistive Exoskeletons for Children
- Soft Knee Energy Harvester
- Low-cost Ankle Prosthetic Joint
- Robotic Assistance for Knee Arthroplasty
- Disposable Exoskeletons for Children
- Sensors and Intuitive Grasping in a Prosthetic Hand
- Parallel Kinematic ROBOTIC Assistance for Knee Arthroplasty
- Computerised Fatigue Testing Machine for Prosthetics Phase 2
- Growing Prosthetic Socket for Lower Arm Amputations
- Growing Prosthetic Socket for Upper Arm Amputations
- Modular Soft Prosthetic Socket
- Computerised Fatigue Testing Machine for Prosthetics Phase 1
- Dynamics and Control of Exoskeleton for STS
- Active Transfemeral Prosthesis for Children
- Transitibial Prosthesis with 3 DOF Ankle joint
- Lower Exoskeleton for Sit-to-Stand
- Design and Realization of Exoskeleton Arms
- Design and Realization of Lower Exoskeleton for Disabled
- Design and Building of a Rehabilitation Walker with a Sit-to Stand Assistance Facility
- Design and Realization of a Palm Trees Climber
- Modelling and Control of a Tri-copter Vehicle
- A single Seat Buggy with Extra Safety Facilities
- Remotely Operated under Water Vehicle for Oil Pipelines Inspection
- A Reconfigurable Wheelchair
- Design, Modelling and Control of Two-Wheeled Mobility Vehicle
- Design and Realization of a Hopping Robot
- Realization of a Monopod Robot that Exploits its Passive Dynamics

SUPERVISED UNDERGRADUATE COURSE-BASED PROJECTS

- Design and Simulation of Sterling Engine Mechanism
- Design and Simulation of Drum Brake Mechanism
- Design and Simulation of Mechanical Counter Mechanism
- Design and Simulation of Mechanical White Board Eraser
- Design and Simulation of PUMA Scooter
- Design and Simulation of Back Hole Loader
- Design and Simulation of Nutcracker
- Design and Simulation of Stone Crusher
- Design and Simulation of Cam Mechanisms
- Design and Simulation of Water Pump
- Design and Simulation of Reciprocating Cutting Mechanism
- Design and Simulation of Lift and Transfer Mechanism for Disabled People
- Design and Simulation of a Mechanical Climber
- Design and Simulation of a PUMA-Like Wheelchair
- Design and Simulation of a Stair Climber Wheelchair
- Design and Simulation of a Palm Tree Climber
- Design and Simulation of a Push Up Machine
- Design and Simulation of a Knock Beam Pump

- Design and Simulation of a Door Locking Mechanism
- Design and Simulation of a Wheelchair with Adjustable Table
- Design and Simulation of a Lifting and Transfer Mechanism for Disabled People
- Design and fabrication of an Oil Sucker Pump prototype
- Design and fabrication of a Four-Bar Can Crusher Mechanism
- Design and fabrication of Cans Holder/Release Mechanism
- Design and fabrication of a Clamping Device
- Design and fabrication of a Windshield Wiper mechanism
- Design and fabrication of a Sand Filter (Shale Shaker): Double Rocker based application

PROFESSIONAL MEMBERSHIPS

- The UK Engineering Council, Charter Engineer (CEng)
- Higher Education Academy (Advance HE), Fellowship
- Institution of Engineering and Technology (MIET)
- Institution of Mechanical Engineering (MIMechE)
- IEEE & IEEE Robotics and Automation Society (Member No. 93874098)
- IEEE Technology and Engineering Management Technical Community
- IEEE Entrepreneurship Exchange Technical Community
- IEEE Biometrics Council
- IEEE Sensors Council
- IEEE Systems Council
- Climbing and Walking Robots association (CLAWAR Association)
- The International Functional Electrical Stimulation Society

REVIEWER FOR INTERNATIONAL JOURNALS

- The Design Journal, Taylor & Frances
- Robotics and Autonomous Systems, Elsevier
- International Journal of Dynamics and Control
- Journal of Intelligent and Robotic Systems
- Robotica
- Robotics and Autonomous Systems, Elsevier

INTERNATIONAL CONFERENCES PROGRAM/TECHNICAL COMMITTEES

- CLAWAR 2022, Portugal
- CLAWAR 2021, Japan
- CLAWAR 2020, Moscow
- CLAWAR 2019, Malaysia
- CLAWAR 2018, Panama
- ICRAE 2017, Shanghai, China
- CLAWAR 2017, Porto, Portugal
- CLAWAR 2016, London, UK
- CLAWAR 2015, Hangzhou, China
- CLAWAR 2014, Poznan, Poland
- CLAWAR 2013, Sydney, Australia
- CLAWAR 2012, Johns Hopkins University, USA
- CLAWAR 2011, Paris, France
- IFAC World Congress 2011, Milano, Italy

- CompBio 2011, July 2011, Cambridge, United Kingdom
- AfricaMS 2010, September 2010, Gaborone, Botswana
- ACIT-CDA 2010, June 2010, Novosibirsk, Russia
- BioMed 2010, February 2010, Innsbruck, Austria
- ACSE 2010, March 2010, Sharm El Sheikh, Egypt,
- AIA 2010, February 2010. Innsbruck, Austria
- ICA 2009, August 2009, Honolulu, Hawaii, USA.
- CA 2009, July 2009, Cambridge, United Kingdom

CONFERENCES SESSION CHAIR

- Personal Care and Assistive Technologies, CLAWAR 2022, Portugal
- Personal Care and Assistive Technologies, CLAWAR 2021, Japan
- Personal Care and Assistive Technologies, CLAWAR 2020, Moscow
- Personal Care and Assistive Technologies, CLAWAR 2019, Malaysia
- Manipulation and Gripping, CLAWAR 2016, UK
- Assistive Robots, CLAWAR 2016, UK
- Locomotion, CLAWAR 2015, China
- Wheeled Systems Session, CLAWAR 2013, Sydney, Australia
- Wheeled Systems Session, CLAWAR 2012, Johns Hopkins University, USA
- Autonomous Robots Session, CLAWAR 2011, Paris, France
- ICAMMM 2010, Sultan Qaboos University, Oman

<u>CONFERENCES ORGANISATION EXPERIENCE – Co-Chair/Programme Review/Publications</u>

- CLAWAR 2022, Portugal
- CLAWAR 2021, Japan
- CLAWAR 2020, Moscow
- CLAWAR 2019, Malaysia
- CLAWAR 2018, Panama
- CLAWAR 2016, London, UK
- CLAWAR 2015, Hangzhou, China
- CLAWAR 2014, Poznan, Poland
- CLAWAR 2013, Sydney, Australia
- CLAWAR 2012, Johns Hopkins University, USA
- CLAWAR 2011, Paris, France
- CLAWAR 2010, Nagoya, Japan
- CLAWAR 2009, Istanbul, Turkey
- CLAWAR 2008, Coimbra, Portugal

PATENTS (R&D company)

- Reconfigurable Wheelchairs: Concepts for Mobility and Rehabilitation (IPONZ Patent no.708437)
- Support Bionics Walker (IPONZ Patent no. 704606)
- Support Bionics Crutch (IPONZ Patent no. 704598)
- Support Bionics Crutch Flexible Foot (IPONZ Patent no. 704602)

BOOKS, BOOK CHAPTERS, PEER REVIEWED JOURNALS & REFREED CONFERENCE PUBLICATIONS

- 1. **[Poster]** Dinary M, Arshaghi B, El-Yahya, and <u>Goher K M</u>, (2024). Evaluating Patients' and Physiotherapists' Perceptions of Soft Gloves for Hand Rehabilitation, *The 1st Rehabilitation Technology Conference, National Rehabilitation Centre, 17-18 Sept 2024, Nottingham, UK.*
- 2. **[Poster]** Arafa M, Goodridge R, Ashcroft I, and <u>Goher K M</u>, (2024). Anthropomorphic Prosthetic Hand Actuators based on Hand Motor Synergy, *The 1st Rehabilitation Technology Conference, National Rehabilitation Centre, 17-18 Sept 2024, Nottingham, UK.*
- 3. **[Journal]** Al Shabibi, A., Aal Thani, I., Al Jahwari, F., & <u>Goher, K.</u> (2024). Failure analysis using finite element method of defective pipelines reinforced with composite repair system. *Petroleum Science and Technology*, 1–19. https://doi.org/10.1080/10916466.2024.2384524
- 4. [Conference] M. Gaber, D. Branson, I. Ashcroft and <u>K. Goher</u>, (2024). "3D-Printed Modified Pinch Valve for Controlling Pneumatic Artificial Muscles," 2024 9th International Conference on Automation, Control and Robotics Engineering (CACRE), Jeju Island, Korea, Republic of, 2024, pp. 435-439, https://doi.org/10.1109/CACRE62362.2024.10635037
- 5. [Conference] Rahmani A, Nnadi S, Mercer K, Nelson-Smith O, Butcher C, Hazell S, Aliyu A, Sohani B and Goher K M, (2024). Enhancing Knee Arthroplasty Precision: Design and Evaluation of a Parallel Kinematic Robotic Assistance System. The 27th International Conference Series on Climbing and Walking Robots and the Support Technologies for Mobile Machines, CLAWAR 2024, 4 6 Sept. 2024, Kaiserslautern, Germany. (In print)
- 6. **[Conference]** Ser Vin Chan, Sohani B, and <u>Goher K M</u>, (2024). A Soft Robotic Gripper for Pancake Handling: Design, Modelling, and Experimental Assessment. The 27th International Conference Series on Climbing and Walking Robots and the Support Technologies for Mobile Machines, CLAWAR 2024, 4 6 Sept. 2024, Kaiserslautern, Germany. (In print)
- 7. **[Conference]** B. Sohani, I. J. Adigun, A. Aliyu, A. Rahmani and K. Goher, <u>(2023)</u>. Developing a Comprehensive Model for the Prevention of Tension Neck Syndrome: A Focus on Musculoskeletal Disorder Prevention Strategies, 2023 WRC Symposium on Advanced Robotics and Automation (WRC SARA), Beijing, China, <u>2023</u>, pp. 541-548, https://doi.org/10.1109/WRCSARA60131.2023.10261803
- 8. **[Journal]** Dinary M, and <u>Goher K M.</u> Design, Characterization and Experimental Validation of 3D-Printed Soft-Rigid Pneumatic Valve for Soft Wearable Robots, *Soft Robotics Journal*. (In review)
- 9. [Journal] Arafa M, Goodridge R, Aschcroft I, and <u>Goher K M</u>. Design Optimization, Modelling and Simulation, and Experimental Testing of a 3D-printed Pneumatic Artificial Muscle for Prosthetic Hand Actuation. (Submitted 22 Oct 2024, In review, J: advanced Intelligent Systems)
- 10. [Journal] Arafa M, and <u>Goher K M</u>. Towards bio-inspired Prostheses based on Human Hand Anthropomorphic Depiction: A Review Article. (Submitted 22 Oct 2024, In review, J: Advanced Science)
- 11. [Journal] Shahalinejad S, <u>Goher K M</u>, Rahmani A and Sohani B. Multi-Stage Classification for Lung Lesion Detection on CT Scan images Applying Medical Image Processing Technique, <u>Sensors</u>. (In review)
- 12. [Conference] Arafa M, and Goher K M. Development of a Prosthetic Finger and Artificial Muscle Actuation Module with Inspiration from the Hand Anatomical Structure, *The 2023 IEEE/RSJ International Conference on Intelligent Robots and Systems, (IROS 2023).* (In progress)
- 13. **[Book]** Byun S, Tokhi M O, Ferreira M I A, Govindarajulu N S, Silva M F, and **Goher K M**, **(2022)**. Value-Sharing between Humans and Robots, https://doi.org/10.13180/icres.2022

- 14. **[Book]** José M. Cascalho, Mohammad O Tokhi, Manuel S Silva, Armando Mendes, <u>Goher K M</u> and Matthias Funk, (2022). Robotics in Natural Settings, https://doi.org/10.1007/978-3-031-15226-9
- 15. [Book] Chugo D, Tokhi MO, Silva MF, Nakamura T, <u>Goher K M</u>, (2021). Robotics for Sustainable Future, https://doi.org/10.1007/978-3-030-86294-7
- 16. **[Book]** Goher K. M and Tokhi M. O. (2011). Two Wheeled Robotic Machine with an Extended Rod: Modelling, Simulation and Control, LAMBERT Academic Publishing, (ISBN: 978-3-8454-2217-6)
 - 17. **[Journal]** Laparidou D, Curtis F, Akanuwe J, <u>Goher K M</u>, Siriwardena A N, Kucukyilmaz A, **(2021)**, Patient, carer, and staff perceptions of robotics in motor rehabilitation: a systematic review and qualitative meta-synthesis, *Journal of Neuroengineering and Rehabilitation*, Vol. 18, Issue 1, pp. 1-24, https://doi.org/10.1186/s12984-021-00976-3
 - 18. **[Journal]** De Barrie D, Margetts R and <u>Goher K M</u>, (2020). SIMPA: Soft-Grasp Infant Myoelectric Prosthetic Arm, *IEEE Robotics and Automation Letters*, https://doi.org/10.1109/LRA.2019.2963820
 - 19. [Conference] De Barrie D, Margetts R and Goher K M, (2020). SIMPA: Soft-Grasp Infant Myoelectric Prosthetic Arm, Proceedings of the *IEEE International Conference on Robotics and Automation (ICRA 2020).* 31 May to 4 June 2020, Paris FRANCE. https://doi.org/10.1109/LRA.2019.2963820
 - 20. [Conference] Elgeneidy K, Fansa A, Hussain I, <u>Goher K M</u>, (2020). Structural Optimization of Adaptive Soft Fin Ray Fingers with Variable Stiffening Capability, *2020 3rd IEEE International Conference on Soft Robotics* (RoboSoft), 779-784. https://doi.org/10.1109/RoboSoft48309.2020.9115969
 - 21. [Book Chapter] Goher K M, Fadlallah S O, (2020). Assistive devices for elderly mobility and rehabilitation: review and reflection, *Assistive Technology for the Elderly*, 305-341. https://doi.org/10.1016/B978-0-12-818546-9.00016-6
 - 22. **[Conference]** De Barrie D, <u>Goher K M</u>, Elgeneidy K, (2020). 3D Printed Variable Infill Soft Fingers for the SIMPA Prosthetic Arm. *UKRAS20 Conference*, https://doi.org/10.31256/Wj4Jc8Q
 - 23. [Journal] Goher K M, Odling L., Hicks T, Thoy J. (2020). A Myoelectric Prosthetic Hand for Toddlers with Hybrid Rigid-Soft Grippers, (In progress)
 - 24. **[Book Chapter]** De Barrie D, and <u>Goher K M</u>, (2020). Design and Development of Transradial Upper Limb Prosthesis for Children with Soft Grippers, <u>https://doi.org/10.1049/pbhe022e_ch10</u>
 - 25. [Journal] Goher K M, Fadlallah S, (2019). Control of a Two-wheeled Machine with Two-directions Handling Mechanism Using PID and PD-FLC Algorithms. *International Journal of Automation and Computing*. DOI: https://doi.org/10.1007/s11633-019-1172-0
 - 26. [Journal] Laparidou D, Curtis F, <u>Goher K M</u>, Kucukyilmaz A, Walker M, Joseph A, Siriwardena N, (2020). Patient, carer and staff perceptions of robotics in rehabilitation: protocol of a systematic review and qualitative meta-synthesis. *PROSPERO International Prospective Register of Systematic Reviews*. DOI: https://doi.org/xxxxxx
 - 27. **[Conference]** De Barrie D and <u>Goher K M</u>, (2019). Conceptual Design of 3D-Printed Active Prosthetic Arm with Soft Grippers for Toddlers, Proceedings of the 22nd International Conference on Climbing and Walking Robots and Support Technologies for Mobile Machines (CLAWAR 2019), Kuala Lumpur, Malaysia, 26 –28 Aug. 2019. https://doi.org/10.13180/clawar.2019.26-28.08.21
 - 28. **[Conference]** Mound B and <u>Goher K M</u>, (2019). User-Centred Conceptual Design of a Lower-Body Exoskeleton for Standing in Elderly, Proceedings of the 22nd International Conference on Climbing and

- Walking Robots and Support Technologies for Mobile Machines (CLAWAR 2019), Kuala Lumpur, Malaysia, 26 –28 Aug. 2019. https://doi.org/10.13180/clawar.2019.26-28.08.25
- 29. [Journal] Goher K M, Fadlallah S, (2018). PID, BFO-optimized PID, and PD-FLC control of a two-wheeled machine with two-direction handling mechanism: a comparative study. Robotics and Biomimetics, 5 (6). ISSN 2197-3768, Robotics and Biomimetics. Vol 5, Issue 6. DOI: https://doi.org/10.1186/s40638-018-0089-3
- 30. [Journal] Chrysostomou, D., <u>Goher, K.,</u> Muscato, G., Tokhi, MO, & Virk, GS (2017). Editorial: Real-world mobile robot systems. *Industrial Robot: The international journal of robotics research and application*, 44 (4), 393-394. https://www.doi.org/10.1108/IR-04-2017-0074
- 31. [Journal] Mansouri N, <u>Goher K M</u>, Hosseini S, (2017). Ethical Framework of Assistive Devices: Review and Reflection, *Robotics and Biomimetics*. Vol 4, Issue 19. DOI: https://doi.org/10.1186/s40638-017-0074
- 32. [Journal] Goher K M, Mansouri N, Fadlallah S, (2017). Assessment of Personal Care and Medical Robots from Older Adults' Perspective, *Robotics and Biomimetics*. Vol 4, Issue 5. DOI: https://doi.org/10.1186/s40638-017-0061-7
- 33. [Journal] Goher K M, Chenhui K, Fadlallah S, Al Shabibi A and Al Rawahi N, (2017) Transient Dynamic Impact Suppression of a Baja Chassis Using Frontal and Rear Shock Absorbers, *International Journal of Crashworthiness*. DOI: http://dx.doi.org/10.1080/13588265.2017.1301081
- 34. **[Journal]** Goher K and Fadlallah S, (2017), Design, Modelling and Control of a Portable Leg Rehabilitation System, *ASME Journal of Dynamic Systems, Measurement and Control*. DOI: http://dx.doi.org/10.1115/1.4035815
- 35. [Journal] Goher K M , Almeshal AM, Agouri SA, Nasir ANK, Tokhi MO, Alenezi MR, Zanki T Al, and Fadlallah S O, (2017) Hybrid spiral-dynamic bacteria-chemotaxis algorithm with application to control two-wheeled machines, *Robotics and Biomimetics*. Vol 4, Issue 1. DOI: https://doi.org/10.1186/s40638-017-0059-1
- 36. **[Journal]** Goher K M and Fadlallah S O, (2017) Bacterial Foraging-Optimised PID Control of a Two-Wheeled Machine with a Two-Directions Handling Mechanism, *Robotics and Biomimetics*. http://dx.doi.org/10.1186/s40638-017-0057-3
- 37. **[Journal]** Goher K M, (2016), A Reconfigurable Wheelchair for Mobility and Rehabilitation Purposes: Design and Realization, Cogent Engineering, 3: 1261502. http://dx.doi.org/10.1080/23311916.2016.1261502
- 38. [Journal] Goher K M, (2016), A Two Wheeled Machine with a Handling Mechanism in Two Different Directions, Robotics and Biomimetics, 3(17):1-22. http://dx.doi.org/10.1186/s40638-016-0049-8
- 39. **[Journal]** Almeshal A M, <u>Goher K M</u> and Tokhi M O, (2013), Dynamic Modelling and Stabilization of a New Configuration of Two-Wheeled Machines, *Robotics and Autonomous Systems, Elsevier*, Volume 61, Issue 5, pp. 443–472. http://dx.doi.org/10.1016/j.robot.2013.01.006
- 40. **[Journal]** Hosseini S E and <u>Goher K M</u>, (2017), Personal Care Robots for Older Adults: An Overview, *Asian Journal of Social Science*, Vol. 13, No. 1. DOI: http://dx.doi.org/10.5539/ass.v13n1pxx
- 41. **[Journal]** Hosseini S E and <u>Goher K M</u>, (2017), Personal Care Robots for Children: State of the Art, *Asian Journal of Social Science*, Vol. 13, No. 1. DOI: http://dx.doi.org/10.5539/ass.v13n1pxx

- 42. **[Journal]** Goher K M, (2016), Mathematical Modelling and Control of a Two-Wheeled PUMA-Like Vehicle, *Mechanical Engineering Research*, Vol. 6, No. 2. http://dx.doi.org/10.5539/mer.v6n2px
- 43. **[Journal]** Mansouri N and <u>Goher K M</u>, (2016), Walking Aids for Older Adults: Review of End-User Needs. *Asian Social Science*, Vol. 12, No. 10. http://dx.doi.org/10.5539/ass.v12n12p109
- 44. **[Journal]** Mansouri N and <u>Goher K M</u>, (2016), Towards Ethical Framework for Personal Care Robots: Review and Reflection, *Asian Social Science*, Vol. 12, No. 10. http://dx.doi.org/10.5539/ass.v12n10p152
- 45. **[Journal]** Mansouri N, <u>Goher K M</u>, (2016), Leading Different Dimensions of Organization Performance through Human Resource Management Practices, *International Journal of Human Resources Studies*, Vol 6, No 4, http://dx.doi.org/10.5296/ijhrs.v6i4.10336
- 46. [Journal] Almeshal A M, <u>Goher K M,</u> M R Alenezi, A Almazeed, J Almatawah, M Moaz, (2015), BFA Optimized Intelligent Controller for Path Following Unicycle Robot over Irregular Terrains, *International Journal of Current Engineering and Technology, Vol.5, No.2*, pp. 1199–1204.
- 47. [Journal] Goher K M Tokhi M. O. and Siddique N. H., (2011), Dynamic modelling and control of a two-wheeled robotic vehicle with a virtual payload, *ARPN International Journal of Engineering and Applied Sciences* (JEAS). Vol.6, No. 3, pp. 1-35.
- 48. **[Conference]** Fadlallah S O and <u>Goher K M</u>, System Identification and HSDBC-Optimized PID Control of a Portable Lower-Limb Rehabilitation Device, CLAWAR 2018, Technological University of Panama, Panama, during 10–12 September 2018.
- 49. **[Conference]** Goher K M, Al-Yahmadi, A., & Bahadur, I. Kinematic Analysis of the Sit-to-Stand Mechanism of a Reconfigurable Wheelchair, Proceedings of the 2016 IEEE-EMBS Conference on Biomedical Engineering and Sciences, Kula Lampur, Malaysia, 4 8 Dec 2016. https://doi.org/10.1109/iecbes.2016.7843558
- 50. **[Conference]** Mansouri N and <u>Goher K M</u>, Assistive Robotic and ethical Norms: State of the Art Survey, CLAWAR 2016, Queen Mary University of London, UK, 12 14 Sept 2016, pp. 632-639. https://doi.org/10.1142/9789813149137 0073
- 51. **[Conference]** Bagheri A and <u>Goher K M,</u> Assistive Robotic Walking Devices: A State-of-the-Art Review, CLAWAR 2016, Queen Mary University of London, UK, 12 14 Sept 2016, pp. 45-54. https://doi.org/10.1142/9789813149137 0009
- 52. **[Conference]** Fadlallah S and <u>Goher K M</u>, A Review of Weed Detection and Control Robots: A World without Weeds, CLAWAR 2016, Queen Mary University of London, UK, 12 14 Sept 2016, pp. 233-240. https://doi.org/10.1142/9789813149137 0029
- 53. **[Conference]** Agouri S A, Tokhi M O, Almeshal A M, Sayidmarie O K and <u>Goher K M</u>, Performance of a Two Wheeled Robot with Extendable Intermediate Body on Irregular Terrains, CLAWAR 2014, Poznan University of Technology, Pozna?, Poland, 21 23 July 2014.
- 54. **[Conference]** Fadlallah S O and <u>Goher K M</u>, Modelling and Control of a Leg Rehabilitation System for a Reconfigurable Wheelchair, ICCSCE2013, Penang, Malaysia, 29 Nov 1 Dec 2013. https://doi.org/10.1109/iccsce.2013.6719952
- 55. **[Conference]** Agouri S, Tokhi O, Almeshal A, Sayidmarie O and **Goher K M**, Performance Evaluation of a New Configuration of Two-Wheeled Robot on Different Surfaces Profiles, ICECCO 2013, Turgut Özal University, Ankara, Turkey, 7-9 Nov 2013.

- 56. [Conference] Goher K M, Modelling and Simulation of a Reconfigurable Wheelchair with a Sit-to-Stand Facility for a Disabled Child, MMAR 2013, Mi?dzyzdroje, Poland, 26 29 August 2013. https://doi.org/10.1109/mmar.2013.6669947
- 57. **[Conference]** Almeshal A M, <u>Goher K M</u>, A. N. K. Nasir and M O Tokhi, Steering and Dynamic Performance of a New Configuration of a Wheelchair on Two Wheels in Various Indoor and Outdoor Environments, MMAR 2013,, Mi?dzyzdroje, Poland, 26 29 Aug 2013. https://doi.org/10.1109/mmar.2013.6669910
- 58. **[Conference]** Almeshal A M, <u>Goher K M</u>, Nasir A N K, Tokhi M O, Agouri S A, Fuzzy Logic Optimized Control of a Novel Structure Two-Wheeled Robotic Vehicle Using HSDBC, SDA and BFA: A Comparative Study, MMAR 2013, Mi?dzyzdroje, Poland, 26 29 Aug 2013. https://doi.org/10.1109/mmar.2013.6669988
- 59. [Conference] Goher K M, Shafiq M and Al- Yahmadi A, Design of a Reconfigurable wheelchair with a Sit-to Stand Facility for Disabled Child, CLAWAR 2013, University of Technology, Sydney, Australia, 14 17 July 2013. https://doi.org/10.1142/9789814525534 0020
- 60. [Conference] Agouri S A, Tokhi M O, Almeshal A M and Goher K M, BFA Optimization of Control Parameters of a New Structure Two-Wheeled Robotic on Inclined Surface, CLAWAR 2013, University of Technology, Sydney, Australia, 14 17 July 2013. https://doi.org/10.13180/cf2013.6514
- 61. **[Conference]** Almeshal A M, <u>Goher K M</u>, Tokhi M O, and Nasir A N, Hybrid Spiral Dynamic Bacterial Chemotaxis Optimisation for Hybrid Fuzzy Control of a Novel Two-Wheeled Robotic Vehicle, CLAWAR 2013, University of Technology, Sydney, Australia, 14 17 July 2013. https://doi.org/10.13180/cf2013.4956
- 62. **[Conference]** Agouri S, Tokhi O, Almeshal A, and <u>Goher K M</u>, Modelling and robust control of a two wheeled vehicle with an extendable intermediate body on an inclined surface, ICECE 2013, Benghazi, Libya, 26 28 March, 2013. https://doi.org/10.2316/p.2013.794-049
- 63. [Conference] Almeshal A M, Goher K M, Tokhi M O and Agouri S A, A new configuration of a two-wheeled double inverted pendulum-like robotic vehicle with movable payload on an inclined plane, ICIES 2012, Alexandria, Egypt, 7 9 Dec. 2012 https://doi.org/10.1109/icies.2012.6530852
- 64. **[Conference]** Almeshal A M, Tokhi M O and <u>Goher K M</u>, Stabilization of a New Configurable Two-Wheeled Machine Using a PD-PID and a Hybrid FL Control Strategies: A Comparative Study, ICCAR 2012, Dubai, UAE, 8 9 Oct. 2012.
- 65. **[Conference]** Almeshal A M, Tokhi M O and <u>Goher K M</u>, A Robust Hybrid fuzzy logic control approach of a novel two-wheeled robotic vehicle with a movable payload under various operating conditions, CONTROL 2012, Cardiff, UK, 3 5 Sep. 2012. https://doi.org/10.1109/control.2012.6334723
- 66. [Conference] Agouri S, Tokhi O, Almeshal A, Sayidmarie O and Goher K M, Dynamic Modelling Of A New Configuration Of Two Wheeled Robotic Machine On An Inclined Surface, MMAR 2012, 27 30 August 2012, Mi?dzyzdroje, Poland. https://doi.org/10.1109/mmar.2012.6347899
- 67. [Conference] Goher K M, Tokhi M O, Almeshal A M, Sayidmarie O and Agouri S A, Impact of Payload Inertia on the System Damping Characteristics of a Two-Wheeled Robotic Machine, CLAWAR 2012, Johns Hopkins University, USA, 23 26 July 2012. https://doi.org/10.1142/9789814415958 0018
- 68. **[Conference]** Al-Siyabi A, <u>Goher K M</u>, Al-Harrasi A, Al-Abdali S, Al-Abri J, Tokhi M O, Almeshal A M, Sayidmarie O and Agouri S A, Mathematical Modelling and PID Control of SQU-Two-Wheeled Mobility

- Vehicle, CLAWAR 2012, Johns Hopkins University, USA, 23 26 July 2012. https://doi.org/10.1142/9789814415958 0021
- 69. [Conference] Goher K M, Al-Harrasi A, Al-Abdali S, Al-Abri J, Al-Siyabi A, Tokhi M O, Almeshal A M, Sayidmarie O and Agouri S A, State Space Modelling and Control of SQU-Two-Wheeled Mobility Vehicle (SQU-TWMV): An Energy Analysis Approach, CLAWAR 2012, Johns Hopkins University, USA, 23 26 July 2012.
- 70. **[Conference]** Almeshal A M, <u>Goher K M</u>, Tokhi M O, Agouri S A and Sayidmarie O, Robust PD-PID Control Approach of New Configuration of Two-Wheeled Machines under Various Operating Conditions, CLAWAR 2012, Johns Hopkins University, USA, 23 26 July 2012. https://doi.org/10.1142/9789814415958 0086
- 71. [Conference] Almeshal A M, Goher K M, Tokhi M O, Agouri S A and Sayidmarie O, Hybrid Fuzzy Logic Control of a Two-Whheled Double Inverted Pendulum-Like Robotic Vehicle, CLAWAR 2012, Johns Hopkins University, USA, 23 26 July 2012. https://doi.org/10.1142/9789814415958 0087
- 72. **[Conference]** Short A R, Saidmarie O K, Agouri S A,Tokhi M O, <u>Goher K M</u>, and A. M. Almeshal, Real Time PID Control of a Two-Wheeled Robot, CLAWAR 2012, Johns Hopkins University, USA, 23 26 July 2012. https://doi.org/10.1142/9789814415958 0013
- 73. [Conference] Corredor Rosendo A C, Agouri S A, Tokhi M O and Goher K M, (2011), Design and Real Time PID control Approach of a Two Wheeled Vehicle with an Extended Rod, CLAWAR 2011, Paris, France, 6 8 Sept., 2011. https://doi.org/10.1142/9789814374286 0006
- 74. [Conference] Almeshal A M, Tokhi M O and Goher K M, (2011), Modelling of Two Wheeled Robotic Wheelchair with Moving Payload, CLAWAR 2011, Paris, France, 6 8 Sep., 2011. https://doi.org/10.1142/9789814374286 0085
- 75. [Conference] Goher K. M. and Tokhi M. O., (2010), A differentially steered two wheeled vehicle with an extended rod: An investigation on the impact of wheels trajectory, CLAWAR 2010, Nagoya, Japan, 31 August 3 Sep. 2010. https://doi.org/10.1142/9789814329927 0006
- 76. [Conference] Goher K. M. Ahmad S. and Tokhi M. O., (2010), A new configuration of two wheeled vehicles: Towards a more workspace and motion flexibility, IEEE ISC 2010, San Diego, CA, USA, April 5- 8. https://doi.org/10.1109/systems.2010.5482350
- 77. [Conference] Goher K. M. and Tokhi M. O., (2009), Genetic algorithm based modelling and control of a two wheeled vehicle with an extended rod, a Lagrangian based dynamic approach, IEEE ICCIS 2009, Birmingham, UK, Sep. 9-10. https://doi.org/10.1109/ukricis.2010.5898100
- 78. [Conference] Goher K. M. and Tokhi M. O., (2009), A two-wheeled vehicle with an extended rod, mechanical design clues and dynamic modelling, IEEE ICCIS 2009, Birmingham, UK, Sep. 9-10. https://doi.org/10.1109/ukricis.2010.5898101
- 79. [Conference] Goher K. M. and Tokhi M. O., (2009), GA-optimised steering and position control a two wheeled vehicle with an extended rod A simulation study, CLAWAR 2009, Istanbul, Turkey, Sep. 9-11. https://doi.org/10.1142/9789814291279 0011
- 80. [Conference] Goher K. M. and Tokhi M. O., (2009), Energy based feedback control of a two wheeled vehicle with an extended rod, CLAWAR 2009, Istanbul, Turkey, Sep. 9-11. https://doi.org/10.1142/9789814291279 0010
- 81. [Conference] Goher K. M. and Tokhi M. O., (2009), A two-wheeled vehicle with an extended rod, A theoretical approach, ICMSAO'09, Sharjah, UAE, January 20-22

- 82. **[Conference]** Ahmad S., Tokhi M. O. and <u>Goher K. M.,</u> (2008), Steering Control of Wheelchair on Two Wheels, CLAWAR 2008, Coimbra, Portugal, Sep. 8-10. https://doi.org/10.1142/9789812835772 0125
- 83. [Conference] Goher K. M. and Tokhi M. O., (2008), Balance control of a TWRM with a dynamic payload, in the CLAWAR 2008, Coimbra, Portugal, September 8-10. https://doi.org/10.1142/9789812835772 0005
- 84. [Conference] Goher K. M. and Tokhi M. O., (2008), Balance control of a TWRM with a static payload, in the CLAWAR 2008, Coimbra, Portugal, Sep. 8-10. https://doi.org/10.1142/9789812835772 0004
- 85. [Conference] Goher K. M. and Tokhi M. O., (2008), Robust control of a two-wheeled robotic machine, in the CONTROLO 2008, Vila Real, Portugal, Jul 21-23.
- 86. [Conference] Goher K. M. and Tokhi M. O., (2008), Modelling, simulation and balance control of a two-wheeled robotic machine with static variation in load position, ECMS 2008, Nicosia, Cyprus, Jun 3-6. https://doi.org/10.7148/2008-0181
- 87. [Conference] Goher K. M. and Tokhi M. O., (2008), Balancing of a two-wheeled robotic machine with payload using PD/FL controllers, *IASTED 2008*, Innsbruck, Austria, Feb. 11-13, pp. 226-231.

PERSONAL MAJOR HONOURS and ACADEMIC DISTINCTIONS

Date	Honour/Distinction	Awarding Institution	
Nov 2020	Best Achievement in Community Engagement	University of Lincoln, UK	
Apr 2020	Charter Engineer Status	(Engineering Council, UK)	
Nov 2019	Individual Merit Award, University of Lincoln	University of Lincoln, UK	
Nov 2019	Team Achievement Award (Enhancing Students' Experience)	University of Lincoln, UK	
Aug 2018	Fellowship of the Higher Education Academy	Higher Education Academy, UK	

KEYNOTE/PLENARY/INVITED SPEAKER/WORKSHOP ORGANISATION

- Soft Robotics in Healthcare (Invited Keynote speaker), the 2nd International Conference on Biomedical Engineering (ICBME 2023), Damascus, Syria, <u>15-17 May 2023</u>
- Advances in Assistive Technologies (Invited Keynote speaker), the 1st International Conference on Biomedical Engineering (ICBME 2022), Damascus, Syria, **16-18 May 2022**
- Advances in Prosthetics and Assistive Technologies (Invited Keynote speaker), the 2nd International Conference for Persons with disabilities IC-PACES 2021, Alexandria, Egypt 7 Mar 2021
- International Workshop Organizer International workshop on Autonomous Platforms, Wireless
 Communication Networks and Field Programmable Gate Array (FPGA) for UVSs, the 1st
 International Conference on Unmanned Vehicle Systems UVS-Oman, Feb 2019
- Engineering the World Masterclass. City College Norwich on 20 May 2021

- Prosthetics Master Class. <u>24th Dec 2019</u> to more than 40 people from NHS hospitals in Bilgram, Lincoln, Boston and MSc Physiotherapy (pre-registration) in collaboration with Rowena Burgess.
- Healthcare Technologies for Assisted Living: An Overview, Research Show Day, <u>22 May 2018</u>, Aston University

OTHER SCHOLARY and SERVICE to the PROFESSION

Service to the profession:

- BSI Standards Committee Member, British Standards Institute (UK)
 - I am active member in number of standardisation committees: AMT/00/02 Robots and Robotic Devices, TC/199 Safety of Machines, TC/184/SC2 Robots and Robotic Devices and BS 8611 Robots and robotic devices: ethical design and robots and robotic systems.
- <u>CLAWAR Association</u> (UK-registered charity)
 - <u>Deputy Treasurer, Chair of Management Team, Projects and Chapters Coordinator, Cross-referencing and Editor of Online Publications CLAWAR Association</u> (UK registered charity for promoting robotics around the world). I am <u>CO-Chair for CLAWAR annual conference since 2014</u> and I member of the organization committee. My duties include but not limited to organizing detailed logistics for the CLAWAR projects, launching new CLAWAR chapters throughout various regions, sharing in the organization of the annual CLAWAR conferences and workshops
- International Conference Programme and Technical Committee

CLAWAR 2022, Portugal; CLAWAR 2021, Japan; CLAWAR 2020 Moscow, CLAWAR 2019 Malaysia, CLAWAR 2018 Panama. ICRAE 2017 Shanghai, China, CLAWAR 2017 Porto, CLAWAR 2016 London, CLAWAR 2015 Hangzhou, CLAWAR 2014 Poznan, CLAWAR 2013 Sydney, CLAWAR 2012 Johns Hopkins University, CLAWAR 2011 Paris, IFAC World Congress 2011 Milano, CompBio 2011 Cambridge, Africa MS 2010 Botswana, ACIT-CDA 2010, Russia, BioMed 2010 Innsbruck, ACSE 2010 Sharm El Sheikh, AIA 2010 Innsbruck, ICA 2009 Hawaii, CA 2009 Cambridge.

ENTERPRISE and KNOWLEDGE TRANSFER ACTIVTIES

- I provided my expertise in design and additive manufacturing to number of initiatives for National Centre of Food Manufacturing (UK). I developed design solutions including 3D printed soft shells for Metos UK (climate & other analytical equipment for use in agriculture) and The Pastry Room (Pastry and Desserts Manufacturer)
- I worked with several SMEs in Lincolnshire, UK and I managed to secure three innovation projects funded by <u>European Regional Development Fund</u> between 2019-2021:
 - 1. <u>3D Printed Custom Jigs for Orthopaedic Alignment Surgery (MSK Doctors Itd, Lincolnshire)</u>
 The aim of this project is to develop a new service for MSK Doctors within Lincolnshire which enables surgeons to plan and perform complex surgery with better accuracy and less operative time. We plan to do this by using 3D Printed Custom Jigs for Orthopaedic Alignment Surgery.
 - 2. Automated Solutions for Stitching Coir Matts (Make An Entrance Itd, Lincoln)

Integrating this new machine within the business (to replace the long and time-consuming hand stitching process) would also enable the company to properly market this product and new brand, as we do not actively advertise due to current workloads on staff. Increase capacity will enable us to market the product and business, and access new markets that we have not accessed before.

3. <u>Design and Development of Closing Mechanisms for Polyurethanes Manufacturing (Merlin Polyurethanes, Spalding, Lincolnshire, UK)</u>

I worked with Merlin Polyurethanes to support the integration of a COBOT to carry out some of the automation in their business. They require help with the integration of the Cobot with their existing machine and carousel, along with designing and building an automatic closing mechanism for the clamps, that will complete the automation process for one of our carousels.

ACADEMIC LEADERSHIP, MANAGEMENT and ADDMINSTRAION

(Examples during working for University of Lincoln, UK)

School/Department level

- I brought 3 externally funded PhD programmes (Newton Fund + Industry)
- Direct impact on NSS results for Mechanical Engineering in 2019 and 2020; a rise of 48 places with ME placed 11th in the UK for overall satisfaction out of 76 institutions).
- Empowering project-based learning (PBL) at the school and influence students and staff to use PBL in delivery.
- Establishing the Biorobotics and Medical Technologies laboratory (BMTec) which influences many students across the University and become a high-profile lab for the University in social media.
- I took a leading role on rebranding the ME/EE programmes to modernise the curriculum and enhance delivery (i.e. more project based learning (PBL) modules introduced, electives with career flavours in Y3 and 4, empowering PBL by introducing and implementing the CDIO educational framework in delivery)
- I proposed, developed, and implemented a "Framework for Programme Moderation: focused groups and clustering modules. This led to identify gabs and avoid overlaps among modules, consistency flow of curricula, integration.
- I proposed and developed a new BEng Biomedical Engineering programme in collaboration with NHS, Medical School and School of Life and Health Sciences.
- I proposed and developed Lincoln Healthcare Technology Innovation Programme (Prosthetics Microcredentials). Interdisciplinary programme (Engineering, Computer Science, Sport and Exercise Science, LIBS, Lincoln International Institute for Rural Health, Life Sciences and Lincoln Medical School).
- The BEng Biomedical Engineering and Prosthetics Micro-credential are intended to be stackable towards a larger qualification; MSc in Healthcare Technologies (with GLLEP, Lincoln Centre of Organizational Resilience, Lincoln International Institute for Rural Health, Medical School and Midlands Engine).
- Future directions will consider developing a new Corrosion Engineering programme in collaboration with School of Chemistry and School of Health and Life Sciences.

- I proposed to the school in June 2019 new ME with modern specializations: (Business, Innovation and Entrepreneurship), (Product Design and Development) and (Engineering and Innovation Management).
- Aligned with my growing research, I developed a new module for L4 "Digital Transformation in Healthcare Technologies" - delivery from Sept 2021.
- I initiated and organized School Action Days 2019, 2020 for the first time in engineering.

College/University level

- Member of the working groups to develop a new BSc Robotics a crossdisciplinarity programme between SoE, CS and LIAT.
- Member of the joint working group "Teaching Futures" for SoE and CS merger
- I acted on 15 April 2021 as a Validation Panel Chair, Bishop Burton College Centre Approval and Validation of BSc (Hons) Sport and Exercise Therapy and Rehabilitation
- Reviewer for the HEAR Accreditation programme
- Active member in the University Mentoring Scheme.
- I have been actively involved in many Universities wider projects; Lincoln Equality of Attainment Projects (LEAP), Towards Embedding Equality, Diversity, and Inclusion (EDI) in the Curriculum, Led by the DVC, PL Review Forum, Educational Leadership CPD Focus Group.
- I proposed a University Project "ENGAGE" with the vision to improve engagement among students at Lincoln; different levels, home and international and to investigate ways to make improvement.
- I have been involved in almost all welcome weeks, offer holder days, open days, virtual open days for engineering. I developed and delivered the SoE mini talk "Engineering the World" during all virtual open days I deliver the Mechanical Engineering talk during all Welcome Weeks.
- I am SoE Education Committee, Exam Moderation Board, Board of Examiners, and share in all College Exam Board.
- I am super active in using social media (i.e. <u>LinkedIn</u> and <u>Twitter</u>) to promote the University teaching and learning, research and public engagements.

External

- Chair of the management team and treasurer of CLAWAR Association Ltd.
- Co-chair, co-organizer and IPC member of the annual CLAWAR international conferences since
 2008
- Invited Keynote speaker, the 2nd International Conference for Persons with disabilities IC-PACES 2021, Alexandria, Egypt (2021)
- Organizer International workshop on Autonomous Systems, the 1st International Conference on Unmanned Vehicle Systems UVS-Oman, (2019)
- Journal reviewer, i.e. Frontiers Digital Health and Artificial Intelligence and Technology.
- I initiated, proposed, and led the engineering team in design and manufacturing PPEs for COVID-19 Campaign to support ULHT hospitals, GPs, and Care homes.
- Enterprise Advisor with GLLEP for the Lincoln UTC (A College for Engineering and Science). See here

- I delivered a "Prosthetics Master Class" in 24th Dec 2019 to more than 40 people from NHS hospitals in Bilgram, Lincoln, Boston and MSc Physiotherapy (pre-registration).
- I will deliver "Engineering the World Masterclass" to City College Norwich on 20 May 2021.
- I proposed and currently taking the lead on a new project "Lincolnshire Innovation and Entrepreneurship Hub"

EXAMPLES OF TECAHING CONTRIBUTIONS and RESPONSIBILITIES

New Curriculum Development (Auckland University of Technology, Lincoln University NZ, Aston University, University of Lincoln UK)

- Vibration and System Dynamics (Auckland University of Technology, NZ)
- Robotics and Autonomous Systems for Agriculture Applications (Lincoln University, NZ)
- Mechatronics Systems Design (University of Lincoln, UK)
- Design Challenges for Engineers (University of Lincoln, UK)
- Prosthetics and Kinematics (University of Lincoln, UK)
- Biomedical Engineering Project (Aston University, UK)
- Kinematics and Prosthetics (Aston University, UK)

2018/2019

Module name and level:	Control Systems, Level 2 (Mechanical and Electrical Engineering)			
Approx. number of	85	Approx. contact Hours: 4 per week		
students:				
My role/contribution	Module Leader			
	I completely changed all the teaching material which were originally based			
	on handwrittei	n handouts. More organise	ed and readily accessible resources	
	were develope	d for online delivery. I pro	ovided additional resources related	
		•	s. I provided links to tutorials and	
			est Speakers from (Endoenergy ltd,	
		· ·	r the first-time thorough revision	
	material before			
Any additional			alks are very inspiring and an eye	
comments	opener to real	life applications of Control S	Systems.	
(e.g. module evaluation)				
Module name and level:	Mechatronics,	Level 2 (Electrical Engineeri	ing)	
Approx. number of	20	Approx contact Hours:	4 per week	
students:				
My role/contribution	Module Leader	•		
	Developed from scratch all learning resources with a greater emphasis on			
	practical impregnation of mechatronics systems in real applications. The			
	module designed to be heavy in practical implementation. I developed a set			
	of practical experiment.			
Any additional	Excellent students' feedback about the delivery, teaching and learning			
comments resources. Overall satisfaction 80%				
Module name and level: BEng Individual Project and MEng Group Project				

Approx.	number	of	7	Approx contact Hours:	3 per week
students:					
My role/co	My role/contribution				
			Supervised 4 B	Eng Individual Projects + 1	MEng Project
			Projects were	based on my research in	children prosthetics and assistive
	technologies. The MEng group project "Prosthetic Hand for Children" wor				
	the 1 st Prize at this year from the SoE.				
Any	additic	nal	Two conferer	nce papers - published	in CLAWAR 2019 international
comments	5		conference an	d led by my students.	

2019/2020

2019/2020				
Module name and level:	Control Systems, Level 2 (Mechanical and Electrical Engineering)			
Approx. number of students:	85 FT + 25 DAs	Approx. contact Hours:	5 per week	
My role/contribution	Module Leader			
Any additional comments	Module evaluation wasn't available.			
(e.g. module evaluation)	I was able to adapt efficiently and timely with changes due to COVID 19 and lockdown. I changed all practical by equivalent simulation activities to cover all the learning outcomes.			
Module name and level:	Mechatronics, Level 2 (Elec	ctrical Engineering)		
Approx. number of students:	15 FT + 25 DAs	Approx contact Hours:	5 per week	
My role/contribution	Module Leader			
Any additional comments (e.g. module evaluation)	Module evaluation wasn't available. I was able to develop extra learning resources to adapt with the online delivery. I sent kits to all FT and DAs students so they can practice at home.			
Module name and level:	BEng Individual Project and	d MEng Group Project		
Approx. number of students:	7	Approx contact Hours:	3 per week	
My role/contribution	Project Supervisor I supervised 4 BEng Individ	ual Projects + 1 MEng Proj	ect	
	All these projects were related to my research in children prosthetics and assistive technologies. The MEng group project "'Computerized Fatigue Testing Machine for Prosthetics" was nominated to the 1st Prize at this year from the SoE.			
	One of my MEng students "James Ownsworth" stated that his MEng project managed to make him stand out when applying for a job in the competitive market even with graduates from Russel group Universities.			
Any additional comments (e.g. module evaluation)	Though all my projects are oriented to be very practical, however I managed to design versions which are more towards simulation considering the lockdown and limited access to our engineering labs.			

2020/2021

Module name and level:	Control System	s, Level 2 (Mechanical and	Electrical Engineering)	
Approx. number of students:	105 FT + 25 DAs	Approx. contact Hours:	13 per week	
My role/contribution	Module Leader			
Any additional comments (e.g. module evaluation)	worked tutoria Module evalua	rther developed the learning resources for online delivery. I added more rked tutorials and real-life industrial applications of control systems. dule evaluation is not available, but students are really enjoying the dule and they found the BB resources very informative and engaging.		
Module name and level:	Mechatronics,	Level 2 (Electrical Engineer	ing)	
Approx. number of students:	15 FT + 25 DAs	Approx contact Hours:	13 per week	
My role/contribution	Module Leader			
Any additional comments (e.g. module evaluation)	introduced new learning resources about various companies working in			
	55 1 1: 1	D :		
Module name and level:	Beng Individual	Project and MEng Group F	Project	
Approx. number of students:	10	Approx contact Hours:	4.5 per week	
My role/contribution	One of the ME	Eng Individual Projects + 2 Eng projects "Parallel Kine	matic Robotic Assistance for Knee	
Any additional comments (e.g. module evaluation)	Arthroplasty" is in collaboration with industry "MSK Doctors Itd". The end phase of the other MEng project "Computerized Fatigue Testing Machine for Prosthetics" will have the potential to lead to IP for the University considering the inhouse designed and developed device for prosthetics fatigue testing for the 1st time.			

OTHER SIGNIFICANT TEACHING RESPONSIBILITIES

Aston University (Jul 2017-Jul 2018)

- Development and delivery of the "Biomedical Engineering Project 2 module". I entirely developed this module
- Co-development and delivery of the "Kinematics and Prosthetics module" developed the Prosthetics part of the module and a module-based project.
- Supervising four research elective project in the Biomedical Engineering programme
- My approach in engaging learners, during these two modules, in project challenges encouraged many of them to think about start-ups for prosthetics for developing nations.

The components of these two modules offered learners the opportunity to develop level-appropriate knowledge and understanding, highly relevant professional and intellectual and transferable skills. These design features have been evolved through a process of evaluation/reflection which has benefited from discussions with students, colleagues and other stakeholders in informal and formal settings (e.g. student-staff committee, programme meetings, academic conferences/workshops). The effectiveness of these design principles is evidenced in the feedback (average 4.7/5) I receive from learners.

Sultan Qaboos University, Oman (Sept 2010 - Jan 2015)

- 11 senior design projects final year students (dissertation, poster, oral presentation, prototyping and demos)
- 27 small design projects (module-based projects) as part of my teaching delivery of the Machine dynamics module. This includes conceptualisation, CAD, modelling and simulation either in CAD SolidWorks or SimScape Matlab toolbox.
- Best two projects award in two successive years (Reconfigurable Wheelchair and Remotely Operated Underwater Vehicle for Oil Pipelines Inspection)

TAUGHT COURSES/ROLES/INSTITUTIONS/CLASS SIZE

University of Nottingham (Associate Professor in Engineering Design), UK (Sep 2022 – present)

Semester	Date	Programme	Course	No of students
1	Feb 22 – present	Mechanical (MSc)	Advanced Engineering Design	65
2	Feb 22 – present	Mechanical (Year 2)	Design, Manufacture and Project	300
2	Feb 22 – present	Mechanical, Product Design and Development, Aerospace Engineering, Manufacturing Engineering (Year 1)	Engineering Design and Design Project	330

University of Lincoln (Senior Lecturer/Programme Leader), UK (Jul 2018 – present)

Semester	Date	Program	Course	No of students
1	Sept 18 – present	Mechanical/Electrical	Control Systems	220
2	Sept 18 – present	Mechanical/Electrical	Mechatronics	220

Aston University (Lecturer), UK (Jul 2017 – Jul 2018)

Semester	Date	Program	Course	No of students
1	Sept – Dec, 2017	Biomedical Engineering	Kinematics and Prosthetics	21
2	Feb – May, 2018	Biomedical Engineering	Biomedical Eng. Project 3	33

Lincoln University, New Zealand (March 2015 – Oct 2015)

Semester	Date	Program	Course	No of students
1	Feb – Jun, 2016	Computing	Robotics and Autonomous Systems	1

Open Polytechnic, New Zealand (Online Distance Learning Program) (March 2015 – Oct 2015)

Semester	Date	Program	Course	No of	No of
				sections	students
1	Mar – Jun, 2015	Diploma EngTec	Mechanics of Machines	1	10
2	Mar – Jun, 2015	BEngTech	Machine Dynamics	1	15
1	Mar – Jun, 2015	BEngTech	Thermodynamics	1	8

Auckland University of Technology, New Zealand (March 2015 – Jun 2015)

Semester	Date	Program	Course	No of sections	No of students
1	Mar – Jun, 2015	BEngTech	System Dynamics and Vibration	1	37
2	Mar – Jun, 2015	BEng	Introduction to Engineering	8	346
			Design		

Sultan Qaboos University – Oman (Sept 2010 – Jan 2015)

Semester	Date	Program	Course	No of	No of
				sections	students
Fall	Sep 10 – Jan 11		Dynamics	1	34
			Machine Dynamics	2	78
Spring	Feb 11 – May11		Eng. Systems and	2	72
			Control	1	28
		(ABET accredited	Mechanical Vibration		
Fall	Sep 11 – Jan 12	programme)	Machine Dynamics	2	75
			Mechanical Vibration	1	32
Spring	Feb 12 – May12	Mechanical	Eng. Systems and	2	68
		Engineering	Control	1	34
		and Mechatronics	Machine Dynamics		
Fall	Sep 12 – Jan 13	Engineering	Machine Dynamics	2	72
			Mechanical Vibration	1	31
Spring	Feb 13 – May13		Eng. Systems and	2	80
			Control	1	36
			Machine Dynamics		
Fall	Sep 13 – Jan 14		Machine Dynamics	2	74
			Mechanical Vibration	1	35
Spring	Feb 14 – May14		Eng. Systems and	2	70
			Control	1	35
			Machine Dynamics		
Fall	Sep 14 – Jan 15		Machine Dynamics	2	68

The University of Sheffield – UK (Sept 2006 – July 2010)

Program	Course	No of students
Master of Automatic Control and Systems Engineering	Master Graduation Projects	3

Bachelor of Automatic Control and Systems Engineering	Adaptive Tuning and Vibration	200
	Control	200
	Fundamental of Control	
	Engineering	

MEDIA COVERAGE OF REASEARCH AND OTHER PROJECTS WITH SOCIAL IMPACTS

Project 1: SIMPA: Soft-Grasp Infant Myoelectric Prosthetic Arm (2019/2020)

This was mainly for recognition of leading a cutting-edge research project for development of the 1^{st} of its type of Myoelectric Prosthetic Arm for Infants in the world.

- 1. https://www.youtube.com/watch?v=MMI7YMV WJM
- 2. http://www.dpaonthenet.net/article/176459/First-3D-printed-sensor-operated-prosthetic-arm-for-toddlers.aspx?fbclid=lwAR250WkRVmKE5Kip2eGjNJTvSe-RcMYhHA7qzraRcS7uu8PHSBabVAVsWYw
- 3. https://www.kirkhamyoung.co.uk/university-of-lincoln-develops-new-prosthetic-arm-for-toddlers/
- 4. https://thelincolnite.co.uk/2020/01/lincoln-engineers-make-3d-printed-toddler-prosthetic-arm/
- 5. https://www.3dprintingmedia.network/uk-researchers-3d-printed-myoelectric-prosthetic-toddlers/
- 6. https://www.proimage3d.com/3d-printing/3d-printed-prosthetic-arm-with-embedded-sensors-for-toddlers/
- 7. https://newatlas.com/children/simpa-3d-printed-prosthetic-arm-toddlers/
- 8. https://3dprintingindustry.com/news/researchers-develop-3d-printed-sensor-embedded-prosthetic-arm-for-toddlers-167189/
- 9. https://fogut.com/uk-engineers-develop-3d-printed-bionic-prosthetic-limb-for-children-in-need/
- 10. https://opedge.com/Articles/ViewArticle/2020-01-15/3d-printed-myoelectric-prosthetic-arm-for-toddlers-prototyped
- 11. https://techxplore.com/news/2020-01-d-printed-sensor-operated-prosthetic-arm-toddlers.html
- 12. https://www.todaysmedicaldevelopments.com/article/3d-printed-prosthetic-arm-toddlers/
- 13. https://www.ideaconnection.com/new-inventions/simpa-prosthetic-designed-for-toddlers-15013.html
- 14. https://livingwithamplitude.com/3d-printed-myoelectric-prosthetic-arm-for-toddlers-prototyped/
- 15. http://www.dpaonthenet.net/article/176459/First-3D-printed-sensor-operated-prosthetic-arm-for-toddlers.aspx

- 16. https://bioengineer.org/first-3d-printed-sensor-operated-prosthetic-arm-for-toddlers-prototyped-by-uk-engineers/
- 17. https://www.electronicspoint.com/news/uk-engineers-develop-the-first-sensor-operated-prosthetic-arm/
- 18. https://www.news-medical.net/news/20200113/UK-researchers-develop-first-3D-printed-sensor-operated-prosthetic-arm-for-toddlers.aspx
- 19. https://www.morgen-filament.de/researchers-develop-3d-printed-sensor-embedded-prosthetic-arm-for-toddlers/
- 20. https://eurekalert.org/pub_releases/2020-01/uol-f3s011320.php
- 21. https://www.med-technews.com/news/prosthetic-arm-for-toddlers-developed-at-university-of-linco/

Project 2: University's COVID-19 Campaign (p£100,000 in Charitable Donations, 2020)

- 1. https://www.lincoln.ac.uk/news/2020/05/1604.asp
- 2. https://thetab.com/uk/lincoln/2020/05/07/uni-of-lincolns-ppe-campaign-raises-almost-80k-in-donations-11617

CONTINOUS PROFESSIONAL DEVELOPMENT (CPD)

United Kingdom

Training	Provider	Date	CPD (hrs)
Senior Leadership Programme	University of	2022/23	60
	Nottingham, UK		
Systematic Review		2019	24
CDIO Framework (delivered)		2019	2
Focus Groups (delivered)		2019	2
Teaching 101		2019	2
Safeguarding Children and Vulnerable Adults		2018	1.5
Introduction to Bid Writing Workshop		2018	2
Management Training Course		2018	7
Active Bystander – Challenging Unacceptable Behaviour		2018	3
Supervisor Training		2018	2
Staff Blackboard Training	University of	2018	1
Consumer Rights Act	Lincoln, UK	2018	3
Data Protection Module		2018	3
Equality in the Workplace		2018	3
Fire Safety		2018	3
Introduction to Health and Safety		2018	3
Stress Awareness		2018	3
The Bribery Act 2010		2018	3
Equality and Diversity		2018	3.5

Assessment and Feedback: Challenges and Opportunities		2018	1.5
Engaging with Media for academics	Aston University,	2018	2
Preparing for PDR for Mangers	UK	2018	3
Effective Probations for Mangers		2018	4
Optimizing Performance for Mangers		2018	7
Charter Engineering Training Day	IMechE, London,	2018	5.5
APM Project Management Qualification Course	UK	2017	35
Routes to Professional Registration	IET, Birmingham,	2018	3
Intellectual Property	UK	2017	3
Future and Emerging Technologies Workshop		2017	1.5
Promotion Workshop	Aston University,	2017	1
Recruitment & Selection	UK	2017	3
Fundamentals of Project Management	IET, Birmingham, UK	2017	3
Bringing Manufacturing Technologies to Life	IET, Warwick University, UK	2017	7
Early Career Researchers Forum	Aston University, UK	2017	14

New Zealand

Training	Venue	Date	CPD (hrs)
Career Planning for Early Career Academics	University of	of 2016	21
Vision Matauranga Workshop	Canterbury, NZ		14
GET Funded Workshop, KiwiNet			7
Smarten UP Your Ideas		2015 - Lincoln University, 2016 NZ	14
PBRF 2018 Assessment Module Training			3
Postgraduate Supervision Workshop			3
Research Data Management: Basics			3
Teaching portfolio workshop			3
Finding and using free content in your courses			3
Turnitin workshop	Lincoln University,		3
Understanding Copyright	NZ		3
TEACHr/Equella copyright clearance process			3
Teaching/Research Nexus Workshop			3
Intellectual Property Protection			3
Camtasia Lectures Recording Training			3

Sultanate of Oman

Training	Venue	Date	CPD (hrs)
Networking			3
Designing of Quizzes for Learning and Assessing			3
Design an E-Learning courses			3

Blackboard Basics	3
Improving Course Relevance	3
The Art of Confidence	3
Balancing an Academic Workload	3
Getting real: the role of assessment in authentic learning	7
Interpreting a Turnitin Report	3
Designing a course for the future	7
ABET Program Assessment Workshop	14
ABET Outcomes Accreditation of Engineering Programs	14

Egypt

Training	Venue	Date	CPD (hrs)
Teacher training, Suez Canal University, Egypt	Cairo University, Egypt		35
Legal and Financial Aspects in Universities			21
Effective Presentation Skills		2012	21
Credit Hours System			21
Communication Skills in Teaching			21
Students Evaluation			21
An Intercultural Course		2006	175