

SATHYANARAYANAN SRIDHAR

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OBJECTIVE: A graduate student determined to transform the knowledge acquired in the field of biomaterials and experience gained from challenging research environments into a full-time doctoral study to join the research fraternity that effectively contributes to the human health care.

EDUCATION:

The University of Texas at Dallas, Richardson, TX

Expected graduation: June 2014

Master of Science in Bioengineering,

SASTRA University, Thanjavur, India

August 2011

Bachelor of Technology in Bioengineering

RESEARCH EXPERIENCE:

Biomaterials for Osseointegrative Novel Engineering lab

University of Texas at Dallas, Richardson, TX

July 2013 – Present

- **Characterization and quantification of metal wear particles from Metal on Metal hip implants:**
Designed Mechanical testing fixture of hip implant bearing interface
- **Effect of bacterial biofilm and micro-motion on the corrosion of dental implants:**
Designed Mechanical testing fixture of dental implants matching the ISO standards
Performed bacterial culture experiments to analyse the effect of bacteria on dental implants
- **Titanium corrosion mechanisms in the oral environment: a retrieval study:**
Analysed the surface of failed retrieved dental implants with different microscopic techniques
Analysed and interpreted results to provide a mechanism of failure

Center for Nanotechnology and Advanced Biomaterials (CenTAB)

SASTRA University, Thanjavur, India

Dec 2010 – Aug 2011

- **Silver Thin Films for Vitamin-C Sensing:**
A chemical sensor developed and designed as a quality control tool for commercial fruit juices
Characterized and analysed silver thin film sensing platform

TECHNICAL SKILLS:

- Material Testing System (MTS)
- Scanning Electron Microscopy (SEM) equipped with Energy Dispersive Spectroscopy (EDS)
- Brukers Atomic Force Microscopy (AFM)
- Keyence Digital Microscopy
- UV-Spectrophotometry
- Bacterial cell culture
- Finite Element Method using ANSYS
- Matlab

ACADEMIC AWARDS:

- Won the best inter-professional research award to the poster presented at CARE fair
- Presented poster at the American Association for Anatomists

PAPERS, POSTERS AND ABSTRACTS:

- Co-author in an article published in Materials journal: *Danieli C. Rodrigues, Pilar Valderramam, Thomas G. Wilson Jr., Kelli Palmer, Anie Thomas, Sathyanarayanan Sridhar, Arvind Adapalli, Maria Burbano, Chandur Wadhvani*; et.al., “Titanium corrosion in the oral environment: A retrieval study” Materials 2013, 6, 5258-5274; doi:10.3390/ma6115258
- Co-author in an article accepted in Advances in Biosensors and Bioelectronics journal: *Subha Visalam TV, Sathyanarayanan S, Karthick D, Sridharan M, Uma Maheswari K*; et.al., “Silver thin films for ascorbic acid sensing”
- Co-author in IEEE-EMBS 2nd Medical Device Symposium poster - *Anie Thomas, Sathyanarayanan Sridhar, Arvind Adapalli, Maria Burbano-Salazar, Sutton Wheelis , Kelli Palmer, Pilar Valderrama, Thomas G. Wilson, Danieli Rodrigues*; et.al., “Development of methodologies to evaluate the effect of bacterial biofilm and micromotion on corrosion of dental implants”
- CARE fair poster - *Sathyanarayanan Sridhar, Danieli C. Rodrigues, Pilar Valderramam, Thomas G. Wilson Jr., Kelli Palmer, Anie Thomas, Arvind Adapalli, Maria Burbano*; et.al., “Microscopic changes on the surface of the dental implants”
- American Association of Anatomists poster - *Sathyanarayanan Sridhar, Danieli C. Rodrigues, Pilar Valderramam, Thomas G. Wilson Jr., Kelli Palmer, Anie Thomas, Arvind Adapalli*; et.al., “Microscopic changes on the surface of the dental implants”
- Co-author in American Association of Anatomists poster - *Anie Thomas, Sathyanarayanan Sridhar, Arvind Adapalli, Kelli Palmer, Pilar Valderrama, Thomas G. Wilson, Danieli Rodrigues*; et.al., “Development of methodologies to evaluate the effect of bacterial biofilm and micromotion on corrosion of dental implants”
- Society For Biomaterials (SFB) abstract submission - *Sathyanarayanan Sridhar, Danieli C. Rodrigues, Pilar Valderramam, Thomas G. Wilson Jr., Kelli Palmer, Anie Thomas, Arvind Adapalli*; et.al., “Development of methodologies to investigate the effect of bacterial biofilm and micro-motion on the corrosion of dental implants”

EXTRA-CURRICULAR ACTIVITIES:

- FIDE (World Chess Federation) rated chess player with a rating of 1906
- Captain of SASTRA University chess team with a successful participation in the South-West zone National Inter-University Chess tournament
- An active member in the team of organizers in my inter-college sports festival
- Skilled in Indian classical percussion instrument – Mirudhangam
- Languages: Tamil, English and basic German