

2017

September 15th -17th, 2017

AAT Annual Meeting

in Greenville, South Carolina, USA

September 15th, 2017

AAT Physician Member Certification Qualification

Course Outline

• Didactic Training and Educational Presentations on:

- Paradigms of care and patient care algorithms for diagnosis and treatment
 - Clinical Objective Criteria for Related NMSK Disorders (areas of specific interest will be audience focused)
 - Clinical Approach to Vasomotor Pain Syndromes Thermographic Vasomotor Mapping and Differential Diagnosis Sympathetic Skin Response Generators Studies and RSD Look Alikes
 - AAT Clinical Guidelines for the Use and Applications of NMSK Thermography
 - AAT Clinical Guidelines on Breast Thermography
 - AAT Clinical Guidelines on Oral-Systemic Thermography
 - Thermography Specific Uses and Applications
 - Review of NMSK, Breast, and Oral-Systemic Thermographic Test Protocols
 - Reading of NMSK, Breast, and Oral-Systemic Thermographic Studies
 - Interpretation of NMSK, Breast, and Oral-Systemic Thermographic Findings
 - Report Generation for Thermal Imaging Studies
- Individually Directed Break Out Sessions
- Administrative and Office Based Thermography Issues: Third Party Coverage issues
- Workers Compensation Coverage Patient Support Groups Professional Staffing and Training
 - Professional Associations (American Academy of Thermology) Future Developments for Thermal Imaging
- Resource Materials to be Provided to Participants
- Articles, Publications, Journals
 - Certificate of Participation

2017 Program and Events**Saturday, September 16th, 2017**

08:00am - Registration

08:30am - *Welcoming Remarks*

Jeffrey Lefko, Greenville, SC, Executive Director, American Academy of Thermology

8:35-9:20am *Keynote Address: Thermal Patterns in Disease and Condition Monitoring*

Marcos Briosci, M.D., Professor of the Department of Neurology, Hospital das Clinicas da Universidade de São Paulo, Brazil.

9:20am - 10:45am *Session 1: Community Education - Promulgating Thermal Imaging Inside and Outside*9:20am-9:40am Update on the AAT Thermography Atlas of Medical Conditions
Jan Crawford, BSN,
Member, AAT Board of Directors9:40-10:00am Equilibration and Cold Challenge Testing Techniques
Robert Schwartz, MD, Greenville, SC,
Chairman, American Academy of Thermology10:00am-10:30am Bridging the Thermography Gap- Public and Physician Outreach
Christine Horner, MD, San Diego, CA,
Member, AAT Board of Directors

-10:30-10:45am Panel Discussion

10:45am -11:15am Break

11:15am -12:30 pm *Session 2: Advancements in Infrared Imaging Cameras, Equipment, and Translational Applications*11:15-11:30pm Physics-Importance of Sensivity in Camera Selection
Robert Schwartz, MD,
Chairman, AAT Board of Directors11:30-11:50am Adsorption/Absorption Thermography-Concurrent Use with Steam for Finger Print Identification
Michael L. Myrick, PhD., Professor, Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC11:50am-12:20pm Forensic and Sports Medicine Applications for Thermal Imaging
Marcos Briosci, MD, President of
Brazilian Medical Thermology Association

Q&A/ Panel Discussion

12:30pm - Lunch (provided)

1:30pm -3:00pm *Session 3: Clinicians Corner: Thermography as an Extension of the Physical Exam for Use in Diagnosis and Treatment*1:30-2:00pm Breast Cancer Prevention
Christine Horner, MD,
Member, AAT Board of Directors2:00- 2:20PM Integrating a Thermal Imaging Lab Within a Medical Practice: Clinical Applications and Practical Pitfalls
George Schakarashwili, MD, Aurora, CO,
AAT Atlas Editor2:20-2:40PM How I Learned to do Interpretations
Eric Ehle, DO, Amarillo, TX, Member, AAT2:40-3:00pm Thermal Imaging: How It Changed My Approach to Patient Care
Matthew Terzella, MD, Greenville, SC, Member, AAT

Panel Discussion

3:00pm - Break

3:30pm -5:00pm *Session 4: Thermal Imaging Advances and Development Issues and Challenges*

3:30-4:00pm "Picture This.." The Independent Technician's Role in Properly Conducting Exams Which Contribute to Physician Diagnostic Information
Jan Crawford, BSN, Member, AAT Board of Directors

4:00- 4:20pm Thermal Images among Different Animals
Dr. Tracy Turner, DVM, Elk River, MN,
Member, AAT Board of Directors

4:20-4:40pm Use of Thermographic Imaging:
An Internist's Perspective
Tashof Bernton, MD, Aurora, CO,
Member, AAT Board of Directors

4:40-5:00pm Integration of Thermography into PMR,
Educational Components of Medical Residency Programs
Bryan O'Young, MD, Geisinger, PA.,
President, AAT Board of Directors
Sam Wu, MD, Geisinger, PA.,
Member, AAT Board of Directors

5:00pm - Annual Scientific Session Wrap Up and Remarks

5:30pm - Session Ends

Shuttle back to Crowne Plaza Hotel

6:30- 7:30pm - Meet and Mingle Reception with the
Leadership at the Crowne Plaza Hotel

Presentation of AAT 2017 Achievement Award

Sunday September 17th, 2017 Committee Meetings

07:30am - Shuttle from Crowne Plaza Hotel

08:00am - SPECIAL THERMOGRAPHERS WORKSHOP: How to Build and Grow Your Thermology Practice - Open for all Attendees

Marketing/Promotion/ Communication Tactics and Plans
Office Practice Issues and Challenges

Website Development

Q&A Session

Networking, Information Exchange

09:30am -10:30am *Open General Session (for all attendees)*

Topics to be Discussed -Membership, Education,
Advocacy, Website Development

10.30 Shuttle returns to Crowne Plaza Hotel

10:45am - 12:45pm Board of Directors Meeting
(Board Members Only)

Further information

American Academy of Thermology

500 Duvall Drive

Greenville, SC 29607

Info@aathermology.org

website: <http://aathermology.org/annual-session-program/>

September 27th - 29th, 2017

14th AITA 2017 (International Workshop on
Advanced Infrared Technology and Applications) in
Québec City, Canada

Conference venue: Université Laval

In the 14th AITA edition, special emphasis will be given to
the following topics:

Advanced technology and materials

Smart and fiber-optic sensors

Thermo-fluid dynamics

Biomedical applications

Environmental monitoring

Aerospace and industrial applications

Nanophotonics and Nanotechnologies

Astronomy and Earth observation

Non-destructive tests and evaluation

Systems and applications for the cultural heritage

Image processing and data analysis

Near-, mid-, and far infrared systems

AITA 2017 is pleased to announce the following keynote
speakers:

Dr. Paolo Bison, CNR - ITC, Italy on "IR thermography
applied to assess thermophysical properties of Thermal
Barrier Coatings".

Dr. Roman Maeve, University of Windsor, Canada on "Cul-
tural Heritage, an IR Perspective".

Dr. Andreas Mandelis, University of Toronto, Canada on
"Photothermal Coherence Tomography (PCT): Three-Di-
mensional Imaging Principles and Non-Invasive Biomed-
ical, Dental and Engineering Materials NDI Applications"

Information: <http://aita2017.gel.ulaval.ca/home/>

AITA Secretariat

e-mail: quebec@gel.ulaval.ca

29th September 2017

Developments in Microvascular Imaging
at IPEM in York, UK

This meeting intends to bring together and promote dis-
cussion between clinicians and academics of the micro-
vascular imaging community.

Full details

including the programme and online registration can be
found on our website here:

[https://www.ipem.ac.uk/ConferencesEvents/Forthcoming
Conferences/EventDetails.aspx?dateid=402](https://www.ipem.ac.uk/ConferencesEvents/ForthcomingConferences/EventDetails.aspx?dateid=402)

For any queries, email conferences@ipem.ac.uk
or ring +44 (0)1904 550598.

18th-20th October 2017

VipIMAGE2017,

VI ECCOMAS Thematic Conference on Computational Vision and Medical Image Processing in Porto, Portugal

Thematic Sessions

Application of Image Analysis in Musculoskeletal Radiology

Organizers:

Silvana Dellepiane, Università degli Studi di Genova, Italy
Angel Alberich-Bayarri, QUIBIM SL - Quantitative Imaging Biomarkers in Medicine, Spain
Waldir Leite Roque, Universidade Federal da Paraíba, Brazil
Zbislav Tabor, Cracow University of Technology, Poland

Computer Vision in Robotics

Organizers:

António J. R. Neves, Universidade de Aveiro, Portugal
Luís Teixeira, Universidade do Porto, Portugal

Computational vision and image processing applied to Dental Medicine

Organizers:

André Correia, Catholic University of Portugal, Portugal
J.C. Reis Campos, University of Porto, Portugal
Mário Vaz, University of Porto, Portugal

Infrared Thermal Imaging in Biomedicine

Organizers:

Ricardo Vardasca,
Joaquim Gabriel,
Faculdade de Engenharia, Universidade do Porto
Rua Dr. Roberto Frias S/N, 4200-465 Porto, Portugal
Emails: rvardasca@fe.up.pt, jgabriel@fe.up.p

Imaging and Image processing in Ophthalmology

Organizers:

Radim Kolar, Brno University of Technology, Czech Republic
Koen Vermeer, Rotterdam Ophthalmic Institute, The Netherlands
Jolita Bernataviciene, Vilnius University, Lithuania
Povilas Treigys, Vilnius University, Lithuania

Imaging of Flows in Lab-on-Chip Devices: trends and challenges

Organizers:

Susana Catarino, University of Minho, Portugal
Rui Lima, University of Minho, Portugal
Graça Minas, University of Minho, Portugal
Mónica Oliveira, The University of Strathclyde, UK

Advances in Lung CT Image Processing

Organizers:

Paulo Eduardo Ambrósio, Universidade Estadual de Santa Cruz, Brazil
Marcelo Costa Oliveira, Universidade Federal de Alagoas, Brazil
Susana Marrero Iglesias, Universidade Estadual de Santa Cruz, Brazil

Emotions classification from EEG signals

Organizers:

Paolo Di Giamberardino, Sapienza University of Rome, Italy
Daniela Iacoviello, Sapienza University of Rome, Italy
Giuseppe Placidi, University of L'Aquila, Italy

Imaging and Simulation Techniques for Cardiovascular Diseases

Organizers:

A J Narracott, University of Sheffield, UK
J W Fenner, University of Sheffield, UK

Meta-learning in Deep Learning: New Trends and Directions

Organizers:

André Carlos Carvalho, Universidade de São Paulo, Brazil
João Paulo Papa, Universidade Estadual de São Paulo, Brazil
Carlos Manuel Milheiro de Oliveira Pinto Soares, Universidade do Porto, Portugal
Claudio Rebelo de Sá, Universiteit Leiden, The Netherlands

Image Analysis and Machine Learning for Skin Ulcers

Organizers:

Sylvie Treuillet, Ecole Polytechnique de Université d'Orléans, France
Benjamín Castañeda Aphan, Pontificia Universidad Católica del Perú, Perú
July Andrea Galeano Zea, ITM Laboratory of Advanced Materials and Energy, Colombia

Advanced Techniques for Image-based Numerical Simulation in Biomedical Applications

Organizers:

Domenico Borzacchiello, Ecole Centrale de Nantes, France
Luisa Silva, Ecole Centrale de Nantes, France
David Gonzalez, University of Zaragoza, Spain

Shape Analysis in Medical Imaging: From Math to Clinics

Organizers:

Paolo Piras, Sapienza Università di Roma, Italy
Paolo Emilio Puddu, Sapienza Università di Roma, Italy
Luciano Teresi, University Roma TRE, Italy
Valerio Varano, University Roma TRE, Italy

Bio-inspired Computing in Medical Image and Data Analysis

Organizers:

Amit Joshi, Sabar Institute of Technology for Girls, India
Nilanjan Dey, Techno India College of Technology, India

The proceedings book will be published by Springer under the book series "Lecture Notes in Computational Vision and Biomechanics" and indexed by Elsevier Scopus

A special issue of the Taylor & Francis international journal "Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization", indexed in ISI Thomson Reuters, Elsevier Scopus and dblp, will be published. All authors of works presented in VipIMAGE 2017 will be invited to submit an extended version to the special issue

Further information

[Www.fe.up.pt/vipimage](http://www.fe.up.pt/vipimage)

Web.fe.up.pt/~vipimage/nav/conference/sessions.htm

2018

13th - 15th April 2018

XXII Meeting of the Polish Society of Medical Thermography Combined with The European Association of Thermology, Zakopane, Poland

All are warmly invited to the annual meeting in Zakopane.

Conference venue:

"HYRNY" Hotel, Pilsudskiego str. 20, Zakopane

Abstract form will be published in Thermology International
Abstract should be submitted to a.jung@spencer.com.pl.

Abstract deadline is 15th March 2018

Registration fee:

Accommodation (2 nights) / meals, welcome dinner 120 E per person (participant, accompanying person) will be paid in cash/credit card on arrival in hotel reception.

EARLY RESERVATION FOR ACCOMMODATION

before March 15th to ensure hotel reservation by email:

a.jung@spencer.com.pl

Scientific Committee

Dr Kevin Hovell Ph.D (UK)

Prof.Kurt Ammer MD,Ph.D (AUT)

Prof.Sillero-Quintana Manuel Ph.D (SPA)

Aderito Seixas MSc. (POR)

Prof. Ricardo Vardasca Ph.D (POR)

Prof.Boguslaw Wiecek Ph.D,Eng (Poland)

Prof.Francis Ring Dsc (UK)

Prof.Anna Jung MD,Ph.D (Poland)

Prof.Antoni Nowakowski Ph.D,Eng (Poland)

Dr.Janusz Zuber MD,Ph.D (Poland)

Prof.Armand Cholewka Ph.D, Eng (Poland)

PROGRAMME AT A GLANCE.

13th April, Friday - 7 p.m. Welcome Dinner (HYRNY Hotel)

14th April, Saturday

9.00 - 11.00 Session I

11.00 - 11.20 Coffee break

11.20 -13.00 Session II

13.00 - 14.15 Lunch

14.30 - 16.00 Session III

16.00 - 16.15 Coffee break

16.15 - 18.00 EAT board meeting

24th - 29th June 2018

QIRT 2018 in Berlin ; Germany

14th Quantitative Infrared Thermography Conference

Venue :

Bundesanstalt für Materialforschung und - prüfung (BAM)
in Berlin-Adlershof and
Ramada Hotel, Berlin Alexanderplatz

Contact:

German Society for Non-Destructive Testing (DGZfP e.V)
Steffi Dehlau

Email: tagungen@dgzfp.de

QIRT Conferences <http://qirt.gel.ilaval.ca>

QIRT 2018: www.qirt2018.de



CALL FOR ABSTRACTS

XIV European Association of Thermology Congress

**“Thermology in Medicine:
Clinical Thermometry and Thermal
Imaging”**

4th – 7th July 2018

*National Physical Laboratory, Teddington, London
United Kingdom*

LONDON 2018

XIV E.A.T. Congress, 4-7 July 

Co-sponsored by:

IPEM Physiological Measurement SIG (www.ipem.ac.uk)

RPS Imaging Science Group (www.rps.org)



www.eurothermology.org

The EAT and the National Physical Laboratory are delighted to invite you to participate in the XIV EAT Congress in Teddington, London, United Kingdom from 4th to 7th July 2018.

The European Association of Thermology exists to promote, support and disseminate research in thermometry and thermal imaging in the fields of human and veterinary medicine and biology. We do this through our peer-reviewed journal Thermology International, regional seminars around Europe, and our flagship Congress, which takes place every three years.

Following on from the most recent meetings in Porto (2012) and Madrid (2015), the Congress heads back to northern Europe for 2018 to the National Physical Laboratory (NPL) in the United Kingdom.

The EAT Board looks forward to welcoming you to NPL's world class conference facilities in the summer of 2018.



Dr. Kevin Howell
EAT President

Chair, 2018 EAT Congress Organising Committee

VENUE.



The National Physical Laboratory (NPL) is the United Kingdom's National Measurement Institute and is located in Teddington, south west London, approximately 30 minutes by taxi from Heathrow Airport and a 30 minute train journey from London Waterloo. www.npl.co.uk/location.

LONDON 2018
XIV E.A.T. Congress, 4-7 July NPL®

XIV EAT CONGRESS 4th – 7th July 2018, NPL.

ORGANISING COMMITTEE.

Kevin Howell (GBR), Chair
Kurt Ammer (AUT)
Roger Hughes (GBR, NPL)
Anna Jung (POL)
Graham Machin (GBR, NPL)
Francis Ring (GBR)
Adérito Seixas (POR)
Rob Simpson (GBR, NPL)
Manuel Sillero-Quintana (SPA)
Ricardo Vardasca (POR)

INTERNATIONAL SCIENTIFIC COMMITTEE.

John Allen (GBR)
Kurt Ammer (AUT)
Damiano Formenti (ITA)
Kevin Howell (GBR)
Anna Jung (POL)
Graham Machin (GBR)
James Mercer (NOR)
David Pascoe (USA)
Igor Pušnik (SLO)
Francis Ring (GBR)
Manuel Sillero-Quintana (SPA)
Adérito Seixas (POR)
Maria Soroko (POL)
Rob Simpson (GBR)
Dieter Taubert (GER)
Rod Thomas (GBR)
Ricardo Vardasca (POR)

KEY DATES.

Abstract submission will open online on 17th August 2017, and authors will be notified of acceptance for oral or poster presentation by 29th January 2018.

17th August 2017. Opening of abstract submission and registration.

29th November 2017. Abstract submission deadline

29th January 2018. Acceptance notification to authors.

26th February 2018. End of Early Registration and deadline for registration of presenting authors.

KEY MEETING THEMES.

Calibration and traceability in biomedical thermometry
 Infrared thermography in biomedicine
 Contact temperature measurement
 Hardware and software solutions for infrared imaging
 Biomedical applications: surgery, neurology, vascular and pain syndromes
 Thermometry in exercise physiology, rehabilitation, and human performance research
 Temperature measurement in animal welfare, veterinary applications and equine physiology

REGISTRATION FEES

| | Early Registration (Until 26 FEB 2018) | Late Registration (After 26 FEB 2018) |
|--------------------------------|--|---|
| EAT/IPEM/RPS MEMBER | £200 | £250 |
| Non-Member | £250 | £300 |
| Student | £170 | £220 |

Registration includes access to all congress sessions, congress lunch and coffee breaks, and the Congress Gala Dinner. Guided visit to the historic Hampton Court Palace on 7th July for a small additional fee. Register online at the congress registration website from 17th August 2017 at <https://www.regonline.co.uk/XIVEATcongress2018>

ACCOMMODATION

There are a number of hotels within walking distance of the National Physical Laboratory and Teddington railway station, and even more choice within a 15-minute radius by train, taxi or bus. Further information about local hotels can be found at <http://www.npl.co.uk/contact-us/local-hotels>. Early booking in 2018 is advisable!

ACCOMPANYING PERSONS

With central London just 30 minutes away by rail, Teddington is an excellent base for accompanying persons to enjoy the capital city of the UK without the need for an organised tour. All accompanying persons are invited to join the Congress Gala Dinner and social programme upon payment of the appropriate fee.

ABSTRACT SUBMISSION

Online abstract submission opens at www.eurothermology.org/congress2018 on 7th August and closes on 29th November 2017. Abstracts should be limited to a maximum of two sides of A4, using the template supplied online. All abstracts will be peer reviewed by the International Scientific Committee, with the decision on acceptance notified by 29th January 2018. The Committee reserves the right to allocate abstracts to oral or poster presentation, but will consider any preference expressed at the time of submission.

PROVISIONAL CONGRESS SCHEDULE

Wednesday 4th July (evening):

Registration desk opens, followed by opening keynote address –

**“Cardiovascular and thermoregulatory responses to heat therapy” – Prof. José González-Alonso,
Centre for Human Performance, Exercise and Rehabilitation, Brunel University, UK**

Welcome drinks reception

Thursday 5th July:

Keynote address –

**“The Kelvin redefinition and its implications” – Prof. Graham Machin, Head of Temperature Standards,
National Physical Laboratory, UK**

Science sessions – day 1

Evening – EAT 2018 Congress Gala Dinner

Friday 6th July:

Science sessions – day 2

EAT General Assembly

Saturday 7th July:

Guided visit to Hampton Court Palace (morning, additional entrance fee payable)

Close of Congress



European Association of Thermology

Short Course on Medical Thermography

*Wednesday 4th July 2018, National Physical Laboratory,
Teddington, UK*

Following on from successful courses in Porto and Madrid, the next EAT Short Course on Medical Thermography will take place immediately prior to the EAT 2018 Congress at the National Physical Laboratory. The course aims to deliver a thorough introduction over one full teaching day to basic thermal physiology and the principles of infrared thermography for human body surface temperature measurement. It will be taught by an experienced faculty of EAT clinicians, biomedical researchers and imaging scientists, along with metrology experts from NPL. Aspects of reliable thermogram capture will be demonstrated in a laboratory session, and students will have the opportunity to practice thermal image analysis in a supervised “hands-on” session.

Syllabus

- Physical principles of heat transfer
- Principles of thermal physiology/skin blood perfusion
- Standardisation of thermal imaging, recording and analysis
- Quality assurance for thermal imaging systems
- Producing a thermographic report
- Provocation tests
- Image analysis
- Hands-on supervised practice
- Educational resources

Registration

The course fee (inclusive of lunch and coffee breaks) is €200

Register online from 17th August 2017 at www.eurothermology.org/congress2018/course

Questions? Contact Dr. Kevin Howell at k.howell@ucl.ac.uk

LONDON 2018

XIV E.A.T. Congress, 6-7 July NPL

XIV EAT CONGRESS 4th – 7th July 2018, NPL.

