

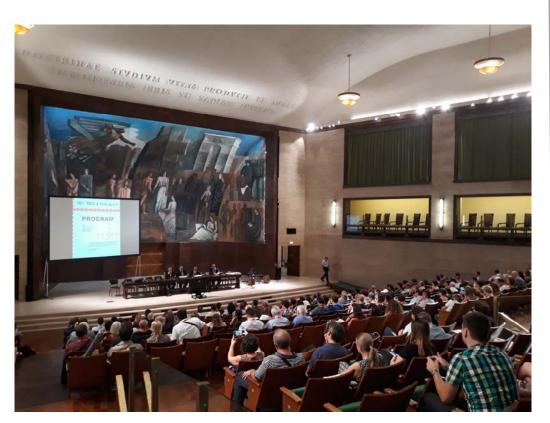
Bollettino dell'Associazione Italiana di Calorimetria e Analisi Termica

#### **AICAT-GICAT news**

Nuova Serie

December 2019

Free distribution



CEEC-TAC 5 and Medicta 2019 Opening Ceremony

# Associazione Italiana di Calorimetria e Analisi Termica Gruppo Interdivisionale di Calorimetria e Analisi Termica <a href="http://www.aicat-gicat.it/index.html">http://www.aicat-gicat.it/index.html</a>

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Responsabile: Ignazio Blanco -Dipartimento di Ingegneria Civile ed Architettura - Università degli Studi di Catania - V.le A. Doria 6 95125 Catania iblanco@unict.it

#### Obituary of Prof. Michael Ewart Brown

#### **Courtesy of ICTAC**

Professor Michael Brown, former ICTAC Secretary and founder member of the South African Thermal Analysis Group, passed away on Friday 31st May 2019, after a long and courageous battle with cancer.

Mike was an exceptional ICTAC Secretary over a period of some ten years and he fulfilled many other roles within ICTAC including Publications Chairman, Affiliate Councillor, Leader of the ICTAC Kinetics Project, and was a valued member of the Nominations Committee, Travel Fund Committee and Awards Committee. In all these positions he gave exemplary and unstinting service, while always displaying tact and good humour, even under difficult circumstances. His outstanding contribution to ICTAC was recognised by the ICTAC Distinguished Service Award in 2008 and by the ICTAC Honorary Lifetime Membership in 2018.



Prof. Michael Ewart Brown

In his retirement, he was able to devote more time to his hobby of woodworking and a number of ICTAC Presidents (including those signing this obituary) were delighted to receive a gavel and sounding board, finely crafted from African hardwood, on taking office. These now form a priceless reminder of their good friend He spent the majority of his working life at Rhodes University, becoming Professor of Physical Chemistry and Dean of Science in 1986. He was a research scientist of exceptional ability, specialising in the decomposition of inorganic solids and the kinetics of solid-state reactions, and published over 130 papers and 5 books. His contribution to the field of solid-state kinetics and his fruitful collaboration with Professor Andrew Galwey of Queens University Belfast was recognised by a special edition of Thermochimica Acta in 2002 and their book "Thermal Decomposition of Ionic Solids" has become a standard work in the field. His dedicated service to the University was recognised by Vice-Chancellor's Distinguished Senior Research Award in 1998 and after his retirement he was made a Distinguished Fellow of Rhodes University. Mike was also an outstanding communicator and the two editions of his book "Introduction to Thermal Analysis - Techniques and Applications" have provided countless thermal analysts with their first introduction to the field.

His work has been recognised by a number of awards including the Mettler Outstanding Achievement Award of the North American Thermal Analysis Society in 1996. The exactness, common sense and humour of the excellent Award lecture on kinetics that he delivered in Philadelphia is still in the memory of many participants at this ICTAC Congress. He also received the South African Chemical Institute's Gold Medal in 2000 and the NATAS Fellowship in 2003.

In spite of his many achievements, Mike was remarkably modest and his kindness and quiet sense of humour made him the best of company. He will be greatly missed by his many friends and colleagues worldwide. Our thoughts and heartfelt condolences go out to his wife Cindy and her family.

Edward Charsley Jean Rouquerol

### **Greetings by the AICAT Past President**



Prof. Giuseppe Arena AICAT Past President

Dear Members,

for the last time, I have the pleasure and the honor to write these few lines in my capacity of Chairman of the Italian Association of Calorimetry and Thermal Analysis (AICAT).

Yes, time has come! I have just retired from University and will soon finish serving my second term as AICAT Chairman.

It is somehow difficult to describe the mixed feelings I experienced while moving out of my room and having a look at the very first AICAT documents I had jealously kept in my file cabinet.

To my own surprise, I realized that I witnessed AICAT foundation and spent more than forty years doing Calorimetry. People I had come in touch with and events I had taken part in flashed in front of my eyes like in a movie trailer. As I was saying, it was sort of mixed feelings. It was sad to realize that some dearest friends were no longer with us. By contrast, realizing that nearly half a century had flown away so quickly meant to me that I have had a pleasant and great time. Purposely, I will not name any of the several people I came in contact with and I am indebted to.

Will I leave the 'Arena'? You know that, owing to my family name, I cannot even though I were willing to.

However may the things go, the end of a presidency is not just a goodbye time but is also a time for weighing things up. There has been a lot of water under the bridge in the last six years and, in my opinion, reviewing some of the pictures of the key moments well summarizes my two terms.







Summer School, Thessaloniki June-July 2014

Left up - with Maria Lalia Kantouri and Isabelle Beurrois. Left down - with our future: The Students. Right - Professor Stefana Milioto. A School organized by our Greek friends though in the midst of a bad economic crisis. Other Colleagues (e.g. Peter Simon, Stefano Vecchio Ciprioti) gave lectures; due to the duration of the School they were not present when the above pictures were taken.





AICAT-GICAT Meeting, Cagliari, September 2014

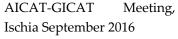
Left - AICAT and GICAT Chairs thank Professor Bruno Marongiu for the precious work done during his two terms; Professor Silvia Porcedda (Co-Organizer) is also in the picture. Right - Professor Adriana Saccone receives the Setaram Award. It is difficult to forget the magnificent ICTAC Meeting organized by Bruno in Chia Laguna, Italy, in 2004. The Meeting was also a good occasion to honor Professor Giovanni Rialdi who had passed away earlier on.



AICAT-GICAT/Russia Round Table, Plyos October 2014

This was the first of a series of Italy-Russia Meetings strongly supported by both Professor Pietro Frè, scientific *attaché* at the Italian Embassy in Moscow, and AICAT-GICAT and accurately organized by the ISUCT, Ivanovo.

I am not inserting any picture of the MEDICTA 2015 held in Girona, Spain in June 2015. I do apologize with our Spanish friends. I am sorry I did not attend the MEDICTA Meeting; I had two very good reasons to miss the Meeting: Michele and Mattia, my twin nephews were born on June 17th 2015.



Left - Mrs Antonella Lucci presents the Lucci Award to Dr. Roberta Risoluti, named after the late Professor Alberto Lucci, who died prematurely in October 1983. Right - Dr Renzo Pepi introduces the TA sponsored Award to Prof. Tina Giancola.





During the Meeting, AICAT and GICAT also commemorated Professor Guido Barone, a leading figure within the Calorimetry

#### AICAT-GICAT/Russia Round Table Susdal, October 2016

Russia-Italy Meetings still go on and have resulted in a few bilateral agreements. Researchers from Ivanovo have been hosted by Italian research groups from different Universities (Turin, Palermo, Catania, Naples, Genova, just to name a few of them). Italian Researchers have visited ISUCT on several occasions





MEDICTA 2017 Loano, September 2017

The Mediterranean Associations for Thermal Analysis and Calorimetry renewed their traditional odd year's appointment in the wonderful setting of the Ligurian Riviera. The congress was organized by professors Adriana Saccone and Anna Maria Cardinale.

#### ESTAC Brasov, August 2018

Left - Professor Lazzara delivers his speach after receiving the Young Researcher ESTAC Award; Right up - Dr Imre Miklós Szilágyi (Editor in Chief) and Dr Alfréd Kállay-Menyhárd (Deputy Editor-In-Chief) present 'JTAC Best Reviewer Award' to Professor Ignazio Blanco. Right down - A group of Italian participants celebrating the Awardees.







#### AICAT-GICAT Meeting, Pisa December 2018

During the Congress organized by Prof. Mariuccia Tinè, old and new generations of Thermal analysts and Calorimetrysts getting together in Pisa.

CEEC-TAC5 & MEDICTA 2019, Rome August 2019

Left - Opening ceremony. Right - Award presentation.

CEEC-TAC and MEDICTA organized a joint Meeting in Rome for the first time. This Meeting will be followed by a Conference having the same format that will be held in Split in 2021.







Although the participation to the events is decreasing due to both the financial problems and the law that regulates new applications for Universities and Research Institutions, that I examined in a previous issue of this Bollettino, the pictures above testify to the vitality of the Italian Thermal Analysis and Calorimetry community. The interaction with people, coming from different Countries and having different cultural backgrounds (Inorganic, Analytical, Physical Chemistry, Biological, Chemical Engineering etc.) and research interests, has been a stimulus and resulted in a series of new collaborations. For example, the Plyos meeting has resulted in new collaborations and exchange of researchers between Italian Universities and ISUCT, Ivanovo; and it all started off with the University of Turin (Professor Della Gatta) hosting a young researcher (Tatiana Usatcheva) from ISUCT.

Perhaps, it is appropriate to recall the following inspiring quote

"The storm and the snow destroy the flower; but its seed they cannot kill" Khalil Gibran (Lebanese-American author, 1883-1931)

I did enjoy the atmosphere within the Community. I came to know many people and had the opportunity to find new exciting ideas and make new friends.

Last but not least, let me express my gratitude to all the people who contributed to the success of AICAT. Again, I will not name them: they are so many and I risk to forget some of themody. I gladly passed the AICAT seal to Professor Stefano Vecchio Ciprioti, AICAT newly elected President. To finish, let me wish good luck to Stefano as well as Professors Marilena Tolazzi and Andrea Melchior who will have the burden to organize next AICAT Meeting.

To you all a Merry Christmas and a Happy New Year.

With all my love,

Giuseppe Arena



# **New Board composition**



During the last AICAT-GICAT general Assembly held in Rome at the "Sala degli Organi Collegiali" of the Sapienza University elections for the renewal of the AICAT and GICAT Board were carried out. Below the new composition

AICAT Board	GICAT Board
Prof. Stefano Vecchio Ciprioti, President	Prof. Giuseppe Lazzara, Coordinator
Prof.ssa Michelina Catauro, Treasurer	Prof.ssa Silvia Porcedda
Prof. Carmelo Sgarlata, Secretary	Prof.ssa Roberta Risoluti
Prof.ssa Anna Maria Cardinale	Prof. Bruno Pagano
Prof.ssa Concetta Giancola	Prof. Andrea Melchior
Prof. Dimitrios Fessas	Prof. Ignazio Blanco
Prof. Giuseppe Arena (Past President)	Prof.ssa Maria Rosaria Tinè (delegata dalla Sez.

During the Assembly Prof. Ignazio Blanco was unanimously designated as new ICTAC Affiliate Councillor, replacing Prof. Giuseppe Della Gatta which served as Councillor in the last years.

# Job opportunities



IRCELYON Position in materials surface characterization using calorimetry and thermal analysis techniques, Lyon, France

Chimica Fisica)

Institution: Centre National de la Recherche Scientifique (CNRS)

**Research Center**: Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)

In the frame of the development of research activities in the area of materials thermodynamics, IRCELYON, invites applications for a tenure-track position. The selection process involves a participation to 2020 Competitive Examinations in December 2019 for Researcher Positions <a href="https://www.dgdr.cnrs.fr/drhchercheurs/concoursch/default-en.htm">https://www.dgdr.cnrs.fr/drhchercheurs/concoursch/default-en.htm</a>

Contact: Aline Auroux, Directeur de Recherche CNRS IRCELYON - UMR 5256 CNRS/Université Lyon1 2 avenue Einstein 69626 VILLEURBANNE Cedex (F)

E-Mail: aline.auroux@ircelyon.univ-lyon1.fr

#### Thermtest Inc. - Technical Inside Sales Opportunity

#### Function of the role of Technical Inside Sales:

As the Technical Inside Sales representative, you will act as the first in line response to customers and distributors worldwide. You will communicate in an open, helpful, and engaging tone and focus on finding the right thermal testing solution for each customer. Knowledge of Thermtest's products, thermal measurement technology, the industry, key competitors, as well as client needs will be taught along the way.



**Duties and Responsibilities:** Communicate with incoming requests from new and existing customers based globally via email, phone and through virtual meetings to explore and determine best equipment solution for the client; Learn and adhere to the Thermtest sales methodology; Keep an accurate current record of client account information and customer interactions on the company's CRM; Learn the technical knowledge of Thermtest products required to communicate effectively with customers to carry a client inquiry through to a successful close of sale; Participate in weekly and quarterly sales development, forecasting and sales reporting meetings; Manage an active sales pipeline based on prescribed sales projections; Participate in marketing efforts when required.

**Skills and experience:** To perform the job successfully, an individual should demonstrate the following competencies to perform the essential functions of this position: Undergraduate degree in Science, Engineering, or Business/Commerce; Team player and comfortable working independently; Self-motivated and high achiever; Excellent time management skills and attention to detail; Proficient English language skills (spoken and written).

**It Would be a Bonus If**: You have previous experience using a CRM; You possess a passion for technology, science, sales generation, and client service;

**Thermtest Offers:** A competitive salary and benefits package; Ongoing learning opportunities within a dynamic, inclusive, and rewarding work environment; The chance to work for a global company and interact with clients and colleagues from around the world; A progressive work environment; Career experiences that will enhance personal and professional growth; Onsite free parking.

Job Type: Full-time

**Join Us:** If this position sounds like the right fit for you, apply to join our team! Please forward us a cover letter and updated resume that highlight why you're the perfect fit. Please, no calls or drop-ins. An initial telephone interview may be conducted for potential candidates followed by at least one on-site interview of selected candidates. Thermtest Inc. is an equal opportunity employer.

#### www.thermtest.com



Associate / Full professor: Quantum chemical modelling

Job description

Associate / Full professor: Quantum chemical modelling

Contribute to a sustainability research program that models hybrid organic/inorganic interfaces on the nanoscale. The Department of Chemistry at Utrecht University in the Netherlands is renowned as a world class center of excellence and innovation in both research and education, fully resourced and equipped with state-of-the-art technological platforms. Currently, the Department is actively recruiting new staff members, including three new colleagues in the field of Materials Science or Theoretical Chemistry. For further information about this role, please contact Prof. dr. D.A.M. (Daniel) Vanmaekelbergh at <a href="mailto:d.vanmaekelbergh@uu.nl">d.vanmaekelbergh@uu.nl</a>, or +31-302532218. To apply, please send your resume, cover letter, research and teaching statement. Please apply at your earliest convenience, there is no deadline connected to this procedure. Everyone deserves to feel at home at our university. We welcome employees with a wide variety of backgrounds and perspectives.



#### Assistant or Associate Professor Metallic materials for space applications

@ Delft University of Technology, Netherlands, Delft

#### Job description

While the department has a well-established expertise in the development of metallic and non-metallic materials for aviation, given the increased and sustained interest in space applications, we decided to broaden our portfolio and to start a new position in the field of metallic materials for space. While polymers and composites will be relevant for space applications too, that field of materials science will be covered by our existing staff. The ideal candidate is expected to develop an own research line in which science-based innovative metallic concepts are combined with suitable metal processing techniques to come up with new industry-relevant concepts and approaches.

#### Requirements

Candidates are expected to be, or be on their way to becoming, authorities in their own field of research. Applicants should have the following qualifications: a PhD degree in Metallurgy or Materials Science and Engineering (specialization field: metals or technical ceramics); and additional professional expertise acquired via one or more suitable post-doc positions or positions of comparable level in industry or elsewhere; Experience in working in the field of metallic materials and space applications; A public track record in scientific research, as evidenced by papers in peer-reviewed journals and presentations at international conferences.

For more information, please contact <u>Prof.dr.ir</u>. S. van der Zwaag, phone:+31 (0)15 2782248, email: <u>S.vanderZwaag-</u>1@tudelft.nl.

To apply, please send a detailed CV, along with a short letter of motivation, names and contact details of two persons who can provide references, a publication list, an abstract of your PhD thesis and two selected publications, compiled into a single pdf file named lastname\_firstname\_yearofbirth.pdf. Please send your application to Shanta Visser, email: S.P.Visser@tudelft.nl.

#### University Teacher (Chemical Engineering Discipline)

Applications are invited for one University Teacher post in Chemical Engineering within the School of Engineering at the University of Edinburgh. The post holder will be expected to contribute to teaching in the discipline and will be expected to: Teach chemical engineering subjects within the BEng and MEng curriculum; Review and enhance learning and teaching in chemical engineering subjects; Contribute to the intellectual and community wealth in the School; Undertake appropriate administrative duties. 1 FTE (35 hours week)



#### Job Purpose

The appointed University Teacher will be expected to contribute to teaching in the discipline of Chemical Engineering within the School of Engineering, and will be expected to: Teach chemical engineering subjects within the BEng and MEng curriculum. The University's undergraduate degrees in Chemical Engineering are accredited by the Institution of Chemical Engineers (IChemE). These include the 5 year MEng and 4 year BEng degrees. In addition, a postgraduate MSc degree in Advanced Chemical Engineering is offered. The successful candidate will be expected primarily to be able to contribute to teaching courses that include: Basic chemical engineering; Numerical and computational methods for chemical engineering.

Further information, including details of undergraduate & postgraduate taught programmes:

#### eng.ed.ac.uk

College of Science and Engineering (ed.ac.uk/science-engineering)

# News from the International Confederation for Thermal Analysis and Calorimetry (ICTAC)

#### The ICTAC Scientific Awards 2020

Nominations for the ICTAC Scientific Awards that will be presented in the 17th ICTAC Congress in Krakow (details later in this issue at pag. 23), 30 Aug.-4 Sept. 2020, are open.

**TA Instrument-ICTAC Award** (application deadline expired) and **ICTAC Young Scientist Award** (due date: 31st January, 2020).

In addition, five ICTAC Travel Grant recipients will be selected from the applicants for the ICTAC Young Scientist Award.

Info at http://www.ictac.org/Young Scientist Award ICTAC Travel Grants 2020 1st Call.pdf

#### Kinetic Committee Meeting at CEEC-TAC5 & Medicta 2019,

#### Sapienza University of Rome, Aug. 31st, 2019

<u>Participants</u>: Ignazio Blanco, Konstantinos Chrissafis, Jordi Farjas, Loic Favergeon, Nobuyoshi Koga, <u>Iiri Malek</u>, Alfred Menyhard, Luis A. Perez-Maqueda, Peter Simon, Andrei Rotaru, Stefano Vecchio Ciprioti.

**Duration**: 2 hours

<u>Topics discussed</u>: A brief overview of KC recommendations published in Thermochim. Acta; Conclusions from Kinetic Workshop during CEEC-TAC5 & Medicta 2019 in Rome, Italy; Preparation of Kinetic Workshop during ICTAC 2020 in Krakow, Poland.

<u>Conclusions</u>: It is recommended a brief meeting of Kinetic Committee before the Kinetic Workshop (KW); KW in Krakow should be organized on second or third day; KW will be chaired by Kinetic Committee chairperson or co-chairperson; 2 - 3 hours of KW subdivided:

- Follow-up tasks from last ICTAC Conference in Orlando (Analysis of multi-step kinetics)
- Other topics: crystallization, decomposition, general kinetic issues

Teams proposed for other topics (panel sub-chairs underlined):

- Crystallization (A. Menyhard, J. Malek, ...)
- Decomposition (N. Koga, L.A. Perez-Maqueda, L. Favergeon, K. Chrissafis, J. Farjas, ...)
- General kinetic issues (P. Simon, A. Rotaru, I. Blanco, S. Vecchio Ciprioti, ...)

These teams are open. Participation of others is most welcomed. It is recommended to discuss also physical meaning of kinetic parameters.

#### 2019 Events

# 9<sup>th</sup> SiAT - Symposium of Thermal Analysis, August 11-13, 2019, Goiânia Brazil.



Prof. Dra. Maria Inês G. Leles Universidade Federal de Goiás (UFG) <u>leles@ufg.br</u>

The 9th SiAT - Symposium of Thermal Analysis, took place August 11-13, 2019 in the city of Goiânia Brazil.

The event was attended by 150 participants and involved 87 banner presentations and 1 short courses, 12 invited presentation and several sponsors (TA Instruments, SETARAM Instrumentation, NETSZCH and MettlerToledo) who exposed their products.

Topics on the application of thermal analysis in food, additives, pharmaceuticals, biodiesel, kinetic studies and the contribution of the technique in material studies in the industry were discussed.

The first invited talk, by Dr. Massao Ionashiro, brilliantly introduced us "The history of thermal analysis in Brazil".

We also had the international participation of Dr. Andrei Rotaru from the University of Craiova (Romania), with the talk the "Thermal investigation and the application of advanced linear kinetic methods in the study of complex materials used as solid fuels: coals, wood and crops"

The best works were also awarded.

The next SiAT (The tenth Symposium of Thermal Analysis) will be held in June 2021 in the city of Campo Grande - MS - Brazil.



Dr. Andrei Rotaru invited Lecture



Prof. Dr. Massao Ionashiro plenary Lecture

### **#CEECTAC #MEDICTA**

5<sup>th</sup> Central and Eastern European Conference for Thermal Analysis and Calorimetry (CEEC-TAC 5) & 14<sup>th</sup> Mediterranean Conference on Calorimetry and Thermal Analysis (Medicta 2019) joint meeting, 27-30 August 2019, Rome, Italy

The Central and Eastern European Conference on Thermal Analysis and Calorimetry and the Mediterranean Conference on Thermal Analysis and Calorimetry are two European Conferences that are held every odd year in the summer season and have essentially the same aim. Both Conferences intend to give participants the opportunity to present the latest results of their research, to interact with several colleagues and hopefully to establish and/or strengthen collaborations and discuss topics of common interest in the field of calorimetry and thermal analysis.

These conferences were jointly organized for the first time at the University of Rome "La Sapienza", Italy from August 27 to August 30 2019. Some 400 participants from all over the world attended this very first event.



Prof. Stefano Vecchio Ciprioti University
"La Sapienza" of Rome
stefano.vecchio@uniroma1.it

Seven plenary lectures (three of which delivered by recipients of awards) and 16 invited lectures were presented during the Conference. The lectures covered topics such as thermal reactivity and thermal properties of solid materials, kinetics of material degradation, thermal behavior of polymers, composite materials and biomaterials, materials for production, energy conversion and storage, applications of thermochemistry, applications to materials for cultural heritage.

The Scientific program also included 108 oral contributions and more than 300 posters presented in four parallel and three distinct sessions, respectively.



Opening Ceremony



"Honorary Member of CEEC-TAC" - to Prof. Janos Kristof

Some of the Contributions have been or will be published in four distinct Special Issues of the Journal of Thermal Analysis and Calorimetry, Ceramics International, Applied Clay Science and Journal of Mining and Metallurgy, Section B: Metallurgy, to give participants the opportunity to publish their results in appropriate Journals.

Each participant was allowed to submit only one manuscript. People willing to publish their contributions in one of the last three Journals may still submit their manuscripts up to the end of January 2020, provided they have received an invitation letter by the Managing Guest Editors. All manuscripts have been or will be subjected to peer reviewing.

Four main social events were organized for both participants and accompanying persons. A concert was held soon after the Opening Ceremony on Tuesday 27th of August. Maestro Roberto Fabbri and his daughters Maria Francesca and Valeria entertained participants with traditional Italian music played with a classical guitar, accompanied by the sweet melodies of Valeria's violin and Maria Francesca's enchanting voice. A Welcome Cocktail was offered in the beautiful Terrace of the Rectorate Building on the same evening. A limited number of participants had the opportunity to make an excursion to Colosseum and the Fori Imperiali (in the afternoon of Wednesday 28th and Thursday 29th), on a first-arrived first-served basis. Nearly three hundred attendees and accompanying people enjoyed a Conference Dinner in the magnificent setting of the Quirinale Hotel in the evening of Thursday 29th.

Being the Chairman of the Conference (together with Andrei Rotaru) and organizing it in my University was challenging but also exciting. The next three years will be rather challenging and exciting, as I have been designated to serve as AICAT President by AICAT General Assembly. I do hope to live up to my distinguished colleagues who have held this position. I trust I can count on the support of several AICAT friends of the AICAT 'family'.

Finally, let me conclude by wishing all of you a Merry Christmas and Happy New Year.

Stefano Vecchio Ciprioti



Left - musical show during the opening ceremony

Right – Poster session



Grants for Young Researchers from Central & Eastern Europe and from Mediterranean area in the field of TA&C



Travel Grants for students from Central & Eastern Europe and from Mediterranean area



AICAT travel grants for young researchers



# Short-cycle Training Courses on Thermal Analysis in Material Science (SC-ThAnMa), Rome 2-6 September 2019

The first week of September from 2nd to 6th, the first of two events entitled Short-cycle Training Courses on Thermal Analysis in Material Science (denoted as SC-ThAnMa) was held in the Aula Seminario of the Department of Basic and Applied Science for Engineering of Sapienza University of Rome.

The project's main aim was to develop "cooperation for innovation and exchange of good practice" by constructing "Strategic Partnership for higher education". It is supported by the EU Programme Erasmus+, with the main objective of training students and experts (professionals) on thermal analysis to study and characterize different classes of materials for different kind of application through flexible short-cycle training courses. It is jointly organized by five Universities (including Sapienza University of Rome, University of Milan, Aristotle University of Thessaloniki, Technical University of Bratislava and the University of Cyprus).

30 Ph.D. students coming from the five above-mentioned Universities attended lectures in which there was a balanced combination of basic principles and practice of Thermal Analysis on Material Science. The teachers that delivered the lectures from monday till friday either in the morning and in the afternoon belong to the same five Universities, partners of the project.



Photo-group for the participants to the School

At the end of the School all the students presented a 10 to 15 minutes oral contribution (prepared starting some weeks before). The topic should be selected among those considered in program of the week. Finally, they received a Certificate of Attendance that could hopefully be helpful in some way for their career of young scientists.

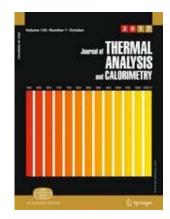
Next year, from 5th to 8th June a second School will be organized in Cyprus and the first Call has been recently disclosed to all the Ph.D. students of these five Universities. We hope to reach the same success of the first School in Rome.

Stefano Vecchio Ciprioti



Teachers and students of SC-ThAnMa School

# Articoli italiani su JTAC 2019



January 2019, Volume 135, Issue 1, pp 371–377

A critical analysis of clustering phenomenon in Al2O3 nanofluids

Fabrizio Iacobazzi, Marco Milanese, Gianpiero Colangelo, Arturo de Risi

February 2019, Volume 135, Issue 4, pp 2111-2115

Dual cure composites: Could body temperature offset the absence of light activation?

M. Petrini, M. Ferrante, D. Vitale, G. Spoto

April 2019, Volume 136, Issue 2, pp 943–955

Thermography data fusion and nonnegative matrix factorization for the evaluation of cultural heritage objects and buildings

Bardia Yousefi, Stefano Sfarra, Clemente Ibarra-Castanedo, Nicolas P. Avdelidis, Xavier P. V. Maldague

May 2019, Volume 136, Issue 3, pp 967-993

Impact of rock fabric, thermal behavior, and carbonate decomposition kinetics on quicklime industrial production and slaking reactivity

Gabriele Vola, Pierangelo Bresciani, Elisa Rodeghero, Luca Sarandrea, Giuseppe Cruciani

June 2019, Volume 136, Issue 5, pp 2063–2070

Physico-chemical and pharmaceutical characterization of sulindac-proglumide binary system

Giovanna Bruni, Mirena Sakaj, Vittorio Berbenni, Lauretta Maggi, Valeria Friuli, Alessandro Girella, Chiara Milanese, Amedeo Marini

July 2019, Volume 137, Issue 2, pp 703-709

Application of differential scanning calorimetry to freeze-dried milk and milk fractions

Alessandro Pugliese, Maria Paciulli, Emma Chiavaro, Germano Mucchetti

August 2019, Volume 137, Issue 3, pp 759–766

Thermal behavior of a phenolic resin for brake pad manufacturing

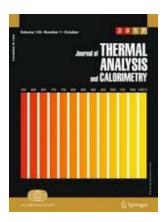
C. Menapace, M. Leonardi, M. Secchi, A. Bonfanti, S. Gialanella, G. Straffelini

August 2019, Volume 137, Issue 3, pp 767–778

Electrospun composite mats of alginate with embedded silver nanoparticles Synthesis and characterization

Maila Castellano, Marina Alloisio, Rimah Darawish, Andrea Dodero, Silvia Vicini

## Articoli italiani su JTAC 2019



September 2019, Volume 137, Issue 5, pp 1673-1680

Isothermal calorimetry protocols to monitor the shelf life and aftermarket follow-up of fresh cut vegetables

Nabil Haman, Marco Signorelli, Celia Duce, Laura Franzetti, Dimitrios Fessas

November 2019, Volume 138, Issue 3, pp 1971-1977

Adsorption isotherms and thermal behavior of hybrids based on quercetin and inorganic fillers

Azzurra Milia, Maurizio Bruno, Giuseppe Cavallaro, Giuseppe Lazzara, Stefana Milioto

November 2019, Volume 138, Issue 3, pp 2057-2064

Tb-Al-Si systems. Experimental study of the liquid-solid phase equilibria in the Al-rich corner

Anna Maria Cardinale, Nadia Parodi

November 2019, Volume 138, Issue 3, pp 2357-2365

Synthesis and thermal characterization of monosubstituted octaphenyl POSS/polystyrene nanocomposites

Ignazio Blanco, Lorenzo Abate, Paola Bottino, Maria A. Chiacchio

November 2019, Volume 138, Issue 4, pp 2721-2732

Calorimetry and thermal analysis in food science An updated review

Alberto Schiraldi, Dimitrios Fessas

November 2019, Volume 138, Issue 4, pp 2901-2912

Experimental and numerical analysis in heat flow sensors calibration

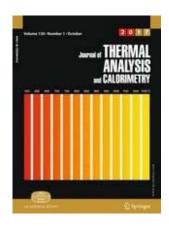
Gino Cortellessa, Fausto Arpino, Marco Dell'Isola, Giorgio Ficco, Luigi Iacomini, Vito Fernicola, Fabio Bertiglia

December 2019, Volume 138, Issue 5, pp 3249–3256

Encapsulating properties of sulfobutylether-β-cyclodextrin toward a thrombin-derived antimicrobial peptide

R. Oliva, F. Battista, S. Cozzolino, E. Notomista, R. Winter, P. Del Vecchio, L. Petraccone

# Articoli italiani su JTAC 2019



December 2019, Volume 138, Issue 5, pp 3257-3265

Silver (I) complexes with long-chain diamines in non-aqueous solvents

Thermodynamic and modeling studies

P. L. Zanonato, A. Melchior, M. Busato, P. Di Bernardo, M. Tolazzi

December 2019, Volume 138, Issue 5, pp 3267–3276

Mechanical and thermal properties of fly ash-filled geopolymers

M. Catauro, E. Tranquillo, F. Barrino, G. Dal Poggetto, I. Blanco, G. Cicala, G. Ognibene, G. Recca

December 2019, Volume 138, Issue 5, pp 3277–3285

Chemico-physical characterization and evaluation of coating properties of two commercial organosilicons, Hydrophase® and Disboxan 450®

A. Spepi, S. Pizzimenti, C. Duce, G. Vozzi, C. De Maria, M. R. Tiné

December 2019, Volume 138, Issue 5, pp 3287-3299

A multi-analytical characterization of artists' carbon-based black pigments

A. Lluveras-Tenorio, A Spepi, M. Pieraccioni, S. Legnaioli, G. Lorenzetti, V. Palleschi, M. Vendrell, M. P. Colombini, M. R. Tinè, C. Duce, I. Bonaduce

December 2019, Volume 138, Issue 5, pp 3311–3321

Effect of phosphate additives on the hydration process of magnesium silicate cements

Thermal and spectroscopic characterization

M. Tonelli, F. Martini, A. Milanesi, L. Calucci, M. Geppi, S. Borsacchi, F. Ridi

December 2019, Volume 138, Issue 5, pp 3323–3333

Characterization of the residue of a commingled post-consumer plastic waste treatment plant: a thermal, spectroscopic and pyrolysis kinetic study

N. M. Ippolito, L. Cafiero, R. Tuffi, S. Vecchio Ciprioti

December 2019, Volume 138, Issue 5, pp 3335–3345

Thermal behavior analysis as a valuable tool for comparing ionic liquids of different classes

A. Mezzetta, V. Perillo, L. Guazzelli, C. Chiappe

December 2019, Volume 138, Issue 6, pp 4061–4090

On the use of phase change materials applied on cork-coconut-cork panels. A thermophysical point of view concerning the beneficial effect in terms of insulation properties

S. Sfarra, S. Perilli, M. Guerrini, F. Bisegna, T. Chen, D. Ambrosini

Manuscript submission @ https://www.editorialmanager.com/jtac/default.aspx

# Articoli italiani su TA 2019



January 2019, Volume 671, pp 26-31

Thermodynamic stability of myoglobin-poly(ethylene glycol) bioconjugates: A calorimetric study

Chiara Pelosi, Francesca Saitta, Frederik R. Wurm, Dimitrios Fessas, Maria Rosaria Tinè, Celia Duce

February 2019, Volume 672, pp 142-149

Effect of silica particle size on the formation of calcium silicate hydrate [C-S-H] using thermal analysis

Riccardo Maddalena, Christopher Hall, Andrea Hamilton

February 2019, Volume 672, pp 157-161

Structural relaxation in PLLA: Contribution of different scale motions

Maria Cristina Righetti, Elisa Mele

June 2019, Volume 676, pp 263-270

Integrated adiabatic scanning calorimetry, light transmission and imaging analysis of collagen deterioration in parchment

C. Cicero, F. Mercuri, S. Paoloni, N. Orazi, U. Zammit, C. Glorieux, J. Thoen

July 2019, Volume 677, pp 60-66

Effect of molecular weight on vitrification kinetics and molecular mobility of a polymer glass confined at the microscale

Xavier Monnier, Daniele Cangialosi

July 2019, Volume 677, pp 67-78

Determination of the equilibrium enthalpy of melting of two-phase semi-crystalline polymers by fast scanning calorimetry

Clément Fosse, Aurélie Bourdet, Estève Ernault, Antonella Esposito, Nicolas Delpouve, Laurent Delbreilh, Shanmugam Thiyagarajan, Rutger J. I. Knoop, Eric Dargent

### Articoli italiani su TA 2019



July 2019, Volume 677, pp 117-130

Crystallization and self-nucleation of PLA, PBS and PCL in their immiscible binary and ternary blends

Seif Eddine Fenni, Jun Wang, Nacerddine Haddaoui, Basil D. Favis, Alejandro J. Müller, Dario Cavallo

July 2019, Volume 677, Pages 180-185

N,N-Diethyl-3-methylbenzamide (DEET): A mosquito repellent as functional plasticizer for poly(l-lactic acid)

Maria Laura Di Lorenzo, Alessandra Longo

July 2019, Volume 677, Pages 186-193

Temperature-induced polymorphism in bio-based poly(propylene 2,5-furandicarboxylate)

Maria Cristina Righetti, Paola Marchese, Micaela Vannini, Annamaria Celli, Fabio Tricoli, Cesare Lorenzetti

August 2019, Volume 678, 178303

Contribution of thermal analysis in the characterization of lime-based mortars with oxblood addition

Kun Zhang, Alberto Grimoldi, Laura Rampazzi, Antonio Sansonetti, Cristina Corti

September 2019, Volume 679, 178316

A potentiometric and microcalorimetric study of the complexation of trivalent europium with lactate: The ionic strength dependency of  $\log \beta'_n$ ,  $\Delta_r H_{m,n}$  and  $\Delta_r S_{m,n}$ 

Andrej Skerencak-Frech, Franziska Taube, Pier Luigi Zanonato, Margret Acker, Petra J. Panak, Plinio Di Bernardo

Volume 682, December 2019, 178420

Thermodynamics and kinetics of the Fenton reaction in foods

S.M.K. Hasan, M. Scampicchio, G. Ferrentino, M.O. Kongi, L.D. Hansen

Volume 682, December 2019, 178432

Experimental thermodynamics, surface and transport properties of liquid Ag-Ge alloys

S. Delsante, G. Borzone, R. Novakovic

### 2020 Events

# XLII National Conference on Calorimetry, Thermal Analysis and Chemical Thermodynamics, Udine June 17th -19th 2020



Palazzo Garzolini Di Toppo Wassermann, Congress venue

The XLII National Conference on Calorimetry, Thermal Analysis and Chemical Thermodynamics jointly organized by AICAT (Associazione Italiana di Calorimetria e Analisi Termica) and GICAT (Gruppo Interdivisionale di Calorimetria e Analisi Termica della Società Chimica Italiana) will be held in Udine, at "Palazzo Garzolini di Toppo Wassermann" on June 17-19 2020 and will gather the scientists working in Calorimetry, Thermal Analysis from Italy and Europe. Its aim is to provide an opportunity for an exchange of scientific information, critical discussion and advanced planning on the most of fundamental and applied research aspects of interest in this field. Chairs of the Congress are Prof. Marilena Tolazzi and Prof. Andrea Melchior.

Udine is situated in the North Eastern part of Italy, about 90 km from Austrian frontiers and 40 km from Slovenia. It can be easily reached by Plane from Venice and Trieste airports by train and bus services. By Train: check the Trenitalia and Italo websites for trains timetables. By Plane – Trieste: Trieste-Ronchi dei Legionari airport connecting Friuli Venezia Giulia Region with some italian and european cities. The Airport is connected to Udine by train and bus (~30' trip). Stations are just outside the terminal. By Plane – Venice: Venice Airport - Marco Polo is one of the main Italian airports connected to many European and International destinations. From Venice Airport take the Bus to Mestre Railway Station (Trenitalia) using either ATVO Bus connection or ACTV Bus connection (BUS no. 15). Then take trains to Udine (line Venezia-Udine-Trieste). Hourly trains are available from Venezia-mestre station to Udine By Plane – Treviso: Treviso Airport - Canova, international airport with many low cost airlines connecting several Italian and European destinations. From Treviso Airport take the public ACTT bus no.6 to the Treviso Railway station and then the train to Udine Ferrovie dello Stato. By Car: A4 Torino-Trieste motorway, A23 Udine-Tarvisio motorway. Exit "Udine sud".

#### **Important Dates**

- Registration & Abstract Submission Opening: February 15th 2020
- Early bird registration fee payment deadline: March 31th 2020
- Payment of regular registration fee deadline: May 1st 2020
- Abstract submission deadline: May 1st 2020
- Abstract acceptance notification: May 15th 2020

#### **Deadlines for applications**

- Grants for postdocs and PhD students (<u>www.aicat-gicat.it/Eng/index\_eng.htm</u>)
- Lucci Award (<u>www.aicat-gicat.it/index.html</u>)

More info @

https://aicat2020.uniud.it/ aicat2020@uniud.it





XII Congresso Brasileiro de Análise Térmica e Calorimetria & V Congresso Pan-Americano de Análise Térmica e Calorimetria, 05 a 07 de Abril de 2020 | Rio de Janeiro/RJ - Brasil

The next Brasilian joint Pan-American Congress of Thermal Analysis and Calorimetry will be held at the Novotel Rio de Janeiro Barra da Tijuca, from 5 to 7 of April 2020. The scientific contributions will be published as full-length articles after independent reviewing in a special number of the **Journal of Thermal Analysis and Calorimetry** (Springer, IF: 2.209; Q2),

Detailed information about the conference: <a href="https://www.abratec.com.br/xiicbratec-vcpanatec2020">https://www.abratec.com.br/xiicbratec-vcpanatec2020</a>





29th Symposium on Thermal Analysis and Calorimetry "Eugen Segal" of the Commission for Thermal Analysis and Calorimetry of the Romanian Academy (CATCAR29), 6-8 May, Craiova, Romania

Between 6 and 8 of May 2020 the Commission for Thermal Analysis and Calorimetry of the Romanian Academy will organize, at the University of Craiova, the 29th Symposium on Thermal Analysis and Calorimetry "Eugen Segal" (CATCAR29).

The scientific contributions will be published as full-length articles in a special number of the Journal of Thermal Analysis and Calorimetry (2018 IF: 2.471). Co-Chairmen of CATCAR29 are Andrei Rotaru & Titus Vlase.

Swiss Society for Thermal Analysis and Calorimetry Annual Meeting 2020, 12-13 May 2020 Zurich, Switzerland

the STK Annual Meeting 2020 will be dedicated to Mastering Heat for Environment and Processes and will take place on the premises of Sika in Zurich (Tüffenwies 16, CH-8048 Zürich).



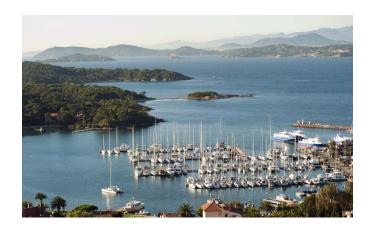
In 2020, the STK society will celebrate its 45th Anniversary. Our Annual Meeting will take place on two half-days: **Tuesday 12. May 2020 afternoon (from 14h00); Wednesday 13. May 2020 morning (to 12h30).** In order to honor our faithful members and friends, the STK board prepared a **Special Event on Tuesday night**: the Meeting Dinner (included in the Registration Fee, no additional cost) will happen during a **3-hours boat trip on the Lake of Zurich!** 

The Call for Abstracts will be published early in 2020. More info @ http://www.stk-online.ch/

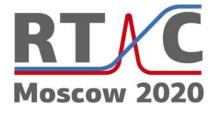
# 50èmes Journées de Calorimétrie et d'Analyse Thermique, June 3-5, 2019 St-Valéry-en-Caux (Normandie)

The 51st edition of the Journées d'Analyse Thermique et de Calorimétrie (JCAT51) of AFCAT (Association Française de Calorimétrie et d'Analyse Thermique) will take place on the island of **Porquerolles** (the largest, most westerly of the three Îles d'Hyères, Var, Provence-Alpes-Côte d'Azur, France) on **May 25-28, 2020**. As for the previous edition (JCAT50, Saint-Valéry-en-Caux, Normandie), the registration will include the accomodation and main meals at the Igesa Center





(https://www.igesa.fr/vos-vacances/recherche-sejour/reserver-mes-vacances/etablissement/porquerolles/) plus the participation to the conferences. A bus will be available from the railway station of Toulon to the pier of Tour Fondue at Giens. A shuttle will ensure the transferts on the island. There will be two possibilities: arrival on monday 25th, or on tuesday 26th (meeting at the railway station of Toulon at the beginning of the afternoon, or directly at the pier). Monday afternoon and tuesday morning will be dedicated to the short-courses on the main techniques used for thermal analysis and calorimetry. The departure from the island will be on thursday 28th, late in the morning.



# $XVI^{th}$ International Conference on Thermal Analysis and Calorimetry in Russia (RTAC-2020), July 5 – 10, Moscow, Russia

The  $16^{th}$  International Conference on Thermal Analysis and Calorimetry in Russia to be held on July 5-10, 2020 in Moscow. The conference is organized by Lomonosov Moscow

State University, Kurnakov Institute of General and Inorganic Chemistry RAS and NUST MISIS. The Department of Chemistry of Lomonosov MSU hosts this event.

The conference is concerned with methods of thermal analysis and calorimetry, phase equilibria and phase transformations, computational methods. Appropriate sections are: Inorganic Substances and Materials Including Complex compounds and Natural Minerals; Organic and bio substances and materials; Equipment, methodology and Standards of Thermal Analysis and Calorimetry. In addition to conference proceedings, selected papers will be offered to be published in the special issue of the Russian Journal of Physical Chemistry A.

Detailed information about the conference: <a href="http://rtac2020.chem.msu.ru/">http://rtac2020.chem.msu.ru/</a>





# 17<sup>th</sup> International Confederation for Thermal Analysis and Calorimetry Congress (ICTAC 2020), 30 August-04 September 2020, Krakow, Poland



The Congress is intended to give the opportunity to researchers, interested in thermal analysis and calorimetry, to meet and to discuss the results of their latest research works. The Congress topics are of considerable interest and attract the interest of numerous scientists both in academia and in industry. One of the aims is to further the understanding of the role of thermal analysis and calorimetry in energy and materials research as these methods continuously develop over the last years.

ICTAC 2020 Congress contains eight sessions - Thermodynamics, Thermochemistry and Kinetics; Instrumentation; Inorganic Materials; Polymers and Organic Compounds; Materials Science; Energy; Life Science; and Colloids and Coordination Chemistry. During the Congress Robert Mackenzie memorial lecture, and several plenary lectures will be given by outstanding scientists. For young scientists, Rigaku-ICTAC Young Scientist Award and ICTAC Travel Grants will be offered.

The venue of the Congress - Kraków - is a historic and beautiful city, rightly viewed by visitors as a "magical" one. Kraków is an important academic centre, and education and culture were distinctive features of the city from the very beginning. The cathedral school, established in 1150, and then Jagiellonian University founded in 1364 by King Kazimierz the Great, were the great educational and academic establishments the city is proud of.

Now in Kraków there are eighteen state and private universities, which are home to over 140,000 students, making the city one of the most important academic centers in Poland and in central and eastern Europe.



ICTAC2020 Conference's venue



Krakow

A Workshop on "Good laboratory practice in thermal analysis and calorimetry" for young researchers / beginners will be held on 30 August 2020 (Sunday) at 9.00-15.00 at Cracow University of Technology. Workshop program includes 5 lectures (for 45 minutes) on TG, DSC, DMA, coupled techniques and kinetics, together with the presentation of thermal analysis lab at Cracow University of Technology.

Detailed information about Program and social program, deadlines for registration and abstract submission are available at <a href="https://ictac2020.jordan.pl/en">https://ictac2020.jordan.pl/en</a>

We do hope you will actively participate in the ICTAC 2020 Congress and we wish you a pleasant and productive stay in Kraków!

Krzysztof Pielichowski

**Conference Chair** 



Prof. Stefano Vecchio Ciprioti Presidente

Prof.ssa Michelina Catauro, Tesoriere

Prof.ssa Carmelo Sgarlata, Segretario

Prof.ssa Concetta Giancola

Prof. Anna Maria Cardinale

**Prof. Dimitrios Fessas** 

Prof. Giuseppe Arena (Past President)

# Consiglio Direttivo AICAT | Consiglio Direttivo GICAT



Prof. Giuseppe Lazzara, Coordinatore

Prof.ssa Silvia Porcedda

Prof.ssa Roberta Risoluti

Prof. Andrea Melchior

Prof. Bruno Pagano

Prof. Ignazio Blanco

Prof.ssa Maria Rosaria Tinè (delegata dalla Sez. Chimica Fisica)

# Come iscriversi all'AICAT

La scheda di iscrizione può essere inviata al Presidente:

Prof. G. Arena, Dipartimento di Scienze Chimiche, Università degli Studi di Catania, Viale A. Doria, 6, 95125 Catania email: garena@unict.it Tel. +39.095.73.85.071

oppure, insieme al pagamento della quota biennale (€ 50,00 per le persone fisiche, € 400,00 per Enti o Industrie) inviato tramite vaglia/assegno al Tesoriere:

Prof.ssa M. Catauro, Dipartimento DII, Università degli Studi della Campania Luigi Vanvitelli, Via Roma 29, Aversa email: michelina.catauro@unicampania.it

Banca UniCredit - Agenzia Roma Boncompagni (00712)

Ragione Sociale: Associazione Italiana di Calorimetria ed Analisi Termica (A.I.C.A.T.)

Codice BIC Swift: UNCRITM1712

IBAN IT 91 L 02008 05211 000101707406

Scheda di Iscrizione: http://www.aicat-gicat.it/doc2/Subscrition%20form.rtf

### Come iscriversi al GICAT

Nell'ambito della iscrizione annuale alla Società Chimica Italiana, oltre alla scelta della Divisione cui afferire, può essere formulata anche l'adesione ai Gruppi Interdivisionali, nella fattispecie bisogna optare per il Gruppo Interdivisionale di Calorimetria ed Analisi Termica

Scheda Iscrizione: https://www.soc.chim.it/iscrizione/new