

TC ANNUAL REPORTING FORM

IMS Technical Committee

25 Medical and Biological Measurements

Reporting period

Starting date (dd/mm/yy)	Ending date (dd/mm/yy)	Date of submission (dd/mm/yy)
October 2022	December 2022	28/04/2023

Website	Last update (07/21)
https://ieee-ims.org/technical-committee/tc-25	

TC Chair or co-Chairs

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	Date of election or appointment
Marco		Parvis	Politecnico d Torino	40306639	+39 011 0904114	Marco.parvis@polito.it	2001-2019
Sergio		Rapuano	University of Sannio	41333078	+39 082 4305600	rapuano@unisannio.it	2020
Voicu		Groza	University of Ottawa	40275238	+1 613 745 7550	VGroza@uOttawa.ca	2008

Secretary (check the right box)

Present ☒

Not Present ☐

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	Date of election or appointment
Sabrina		Grassini	Politecnico di Torino			sabrina.grassini@polito.it	2020

TC Membership list^(*)

First Name	Second Name	Family Name	Affiliation /Address	Member ship number	Pho ne	e-mail address	TC assignments (joining year)
Marco		Parvis	Politecnico di Torino, Italy			marco.parvis@polito.it	Chair to 2019
Sergio		Rapuano	University of Sannio, Italy			rapuano@unisannio.it	Chair from 2020
Voicu		Groza	University of Ottawa, Canada			vgroza@uottawa.ca	Co-Chair

* Please add as many rows as needed

Pasquale	Daponte	University of Sannio, Italy	daponte@unisannio.it	Chairman of MeMeA Steering Committee	
Gregorio	Andria	Politecnico di Bari, Italy	andria@misure.poliba.it	Member	
Eulalia	Balestrieri	University of Sannio, Italy	balestrieri@unisannio.it	Member	
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Banakhr	Fhad	Loughborough University Loughborough, UK	fbyic@hotmail.com	Member	
Rafiq	Goubran	Carleton University, Canada	Rafik.Goubran@sce.carleton.ca	Member	
Sabrina	Grassini	Politecnico di Torino, Italy	sabrina.grassini@polito.it	Secretary	
Jiabin	Jia	University of Edinburgh, UK	Jiabin.Jia@ed.ac.uk	Member	
Baki	Karaböce	TÜBİTAK UME, Turkey	baki.karaboce@tubitak.gov.tr	Member	
Anna	Maria Lucia	Lanzolla	Politecnico di Bari, Italy	lanzolla@misure.poliba.it	Member
Aimè	Lay-Ekuakille	University of Salento, Italy	aime.lay.ekuakille@unisalento.it	Member	

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Adam	Polak	Wroclaw University of Science and Technology	adam.polak@pwr.edu.pl	Member
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* Please add as many rows as needed

TC mission – field of expertise (max. 1000 char. Including spaces)

- Sensors for the measurement of clinical and/or biological parameters. Many new or improved sensors are continuously developed that allow new and more accurate measurements and diagnoses to be performed.
- Data processing either conventional or non conventional. The enormous amount of data generated by different kinds of instruments, such as TAC and NMR, requires processing strategies, which help the physicians to extract the most important features of each exam.
- Instrument and procedure characterization. Medical instruments and related data processing deeply interact with the physician who emits the diagnoses. This is a remarkable difference with respect to other 'conventional' instruments where standard accepted procedures are used for the uncertainty expression.
- Instrument interoperability and interconnection. Most diagnoses are obtained by combining tests results generated by different instruments. The 'data fusion' is often performed by the physician only at the end of the measurements process, but an easier possibility to access raw data generated by the different instruments could greatly improve the diagnosis quality.
- Measurement techniques for athletic performance. Assessing the athletic performance as well as discovering abnormal behavior due to as an example doped performers requires combining sensor, data processing and instruments and represents a challenge of increasing importance.
- Instruments and devices for impaired people. The advances in the digital processing and the micro and nanotechnology open new and surprising possibilities to help people who need help. This is a highly ethical research everyone should be committed to.
- Maintain liaisons with other committees, groups, societies, and organizations working on soft-computing technologies and in the applications fields.

TC meetings in the reporting period^(*)

Date (dd/mm/yy)	Online / Face2Face	Attendance (number)	TC Members	Information sent within 4 months to (Yes/No)		
				Chair of TSAC	IM Magazine	Other (specify)

Minutes of the yearly meeting (separate file)¹

Participation in Society sponsored Events (Conferences, Symposia, Workshops) ^(*)

Name of the Event	Starting date (event) (dd/mm/yy)	Ending date (event) (dd/mm/yy)	Date Partecipation (dd/mm/yy)	Type of participation (Yes/No)			
				Sponsorship	Session	Tutorial	Other (specify) ²
I2MTC 2023	22/05/23	25/05/23	all				Peer review of papers and coordination of Special Sessions
MeMeA 2023	14/06/23	16/06/23	all	X	X	X	Organizing entity

Involvement in standard development^(*)

Standard	Working Group	Revision	Activity in the reporting period, including dates	Notes, attendance
IEEE P1721	SCOBPM	PAR Withdrawn	None. Looking for a supporting industry to restart the activities.	

¹ Yes/No, date of the yearly meeting;

² For example, Involvement in reviewing papers (and indicate approximate number of paper reviews for the listed event)

* Please add as many rows as needed

Participation in the development of Society Educational Programs^(*)

Program name	Involvement of chapters and sections	Activity in the reporting period, including dates	Notes, attendance
I&M Society Short Course		Three members of the TC-25 are in the Editorial Committee	

Other Activities (tutorials, teaching, career, cooperation, publications, joint activity with chapters or sections) ^(*)

Type of activity	Starting date (dd/mm/yy)	Ending date (dd/mm/yy)	Activity in the reporting period	Notes, attendance
DLs	<i>several</i>	<i>several</i>	Jacob Scharcanski used to be a very active DLs of the Society with many trips per year before COVID	
DLs	<i>several</i>	<i>several</i>	Antonio Esposito – DL for 2023-2025 for novel human-computer interactions	

Recommended candidates^(*)

Type (ADCOM, Fellow, Award –specify-)	First Name	Second Name	Family Name	Affiliation /Address	Motivation

TC operating Plan: near-term plans for the upcoming year, including scheduled meetings, activities, and so on (max. 1000 char. Including spaces)

The TC sponsored and organized the MeMeA 2023 in Jeju, Korea, and it is sponsoring and organizing the MeMeA 2024 whose venue is still under discussion by the Steering Committee. TC-25 is one of the few TCs that realized a teaser video to recruit new members. A new version of the video actually published on the TC web page, will be disseminated on Youtube. The latest short paper for I&M Magazine has been published in November 2022. A reorganization of the TC has been approved in the last annual meeting with the formation of three sub-committees: nominations and appointments, publications and publicity, young researchers. During the year 2022 the Standard Association reviewed the TC Policies and Procedures and asked for an update. The revised Policies and Procedures have been submitted and approved. We plan to improve our visibility on the Society web site and on social media.

TC operating plan: long term vision from 2-5 years out, based on IMS Strategic Plan, including areas of strength, areas for improvement, how is the subject area going to change, planned actions for lifting achievement succession plans etc. (max. 1000 char. Including spaces)

The TC plans to continue to sponsor the successful series of the MeMeA symposia in the next years and to look for the opportunity to start a new PAR about the blood pressure measurement in the long term. To that aim the new Procedures and Policies document has been submitted to Standards Association and has been approved.

^{*} Please add as many rows as needed

TC convergence, synergy, cooperation with other TC, from I&M or other societies (max. 1000 char. Including spaces)

The TC had valuable synergies with the Italy Chapter of IMS for a parallel event to MeMeA 2016 and with the Minneapolis Chapter for the organization of MeMeA 2017.

MeMeA is included in the Education Committee strategic plan as a potential venue for new joint initiatives: the IMS Tutorials, the IMS Open Day and the Short Courses. The MeMeA steering committee and the whole TC will contribute to the initiatives.

Some DL volunteers from the TC are often presented to the DL selections of the Education Committee and one of them used to be very active DL of the Society before COVID.

The TC-25 is involved in the Publications Committee initiatives to publish papers to raise the awareness of the IEEE members on the IMS technical activities. A paper "Instrumentation and measurement in medical, biomedical, and healthcare systems", by S. Shirmohammadi, K. Barbè, D. Grimaldi, S. Grassini and S. Rapuano, was published on the IEEE Instrumentation and Measurement Magazine, vol. 19, no. 5, pp. 6–12, 2016. A second paper "Updates about TC-25: the Technical Committee on Biological and Medical Measurements" has been published to introduce the TC-25 interest fields and activities. A third paper "TC-25: The Latest Activities of Technical Committee on Biological and Medical Measurements" has been published in November 2022.

Three AdCom members-at-large are TC-25 members, the former TC-25 Chair was VP TSAC for three terms, the current TC-25 Chair is VP TSAC.

Comments/Suggestions (max. 1000 char. Including spaces)
