

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)
September 2020	October 2021	18/10/2021

Website https://ieee-ims.org/technical-committee/tc-25	Last update (mm/yy) 07/21
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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 Di 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
Diego		Barrettino	University of Applied Sciences and Arts of Southern Switzerland	diego.barrettino@supsi.ch	Member
Kurt		Barbè	Free University of Bruxelles (VUB)	Kurt.Barbe@vub.ac.be	Member
Miodrag		Bolic	University of Ottawa, Canada	mbolic@uottawa.ca	Member
Sandro		Carrara	École Polytechnique Fédérale de Lausanne Switzerland	sandro.carrara@epfl.ch	Member
Andrea		Cataldo	University of Salento, Italy	andrea.cataldo@unisalento.it	Member
Marcantonio		Catelani	University of Florence, Italy	marcantonio.catelani@unifi.it	Member
Max		Cortner	Boston Scientific, USA	Max.Cortner@bsci.com	Member
Hilmj		Dajani	University of Ottawa, Canada	hdajani@site.uottawa.ca	Member
Luca		De Vito	University of Sannio, Italy	devito@unisannio.it	Member
Branislav		Djokic	Ottawa IMS Chapter	branislav@ieee.org	Member
Imad	H.	Elhajj	American University of Beirut, Lebanon	ie05@aub.edu.lb	Member
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

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Aimè	Lay-Ekuakille	University of Salento, Italy	aime.lay.ekuakille@unisalento.it	Member
Francesco	Lamonaca	University of Sannio, Italy	flamonaca@unisannio.it	Member
Mart	Min	Tallinn University of Technology, Estonia	mart.min@ttu.ee	Member
Anirban	Mukherjee	Indian Institute of Technology Kharagpur, India	manirban@ieee.org	Member
Emil	Petriu	University of Ottawa, Canada	petriu@site.uottawa.ca	Member
Adam	Polak	Wroclaw University of Science and Technology	adam.polak@pwr.edu.pl	Member
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Sreeraman	Rajan	Carleton University, Ottawa Canada	sreeraman@ieee.org	Member
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Wuliang	Yin	University of Manchester, UK	Wuliang.Yin@manchester.ac.uk	Member

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.

* Please add as many rows as needed

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* 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)
<i>MeMeA steering committee</i> 15/06/2021	Telecon	23	Yes	Yes	No	No
06/10/2021	Telecon	16	Yes	Yes	No	No

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 Participation (dd/mm/yy)	Type of participation (Yes/No)			
				Sponsorship	Session	Tutorial	Other (specify) ²
<i>I2MTC 2021</i>	23/05/21	25/05/21	all				Peer review of papers and coordination of Special Sessions
<i>MeMeA 2021</i>	23/05/21	25/05/21	all	X			Organizing entity

Involvement in standard development^(*)

Standard	Working Group	Revision	Activity in the reporting period, including dates	Notes, attendance
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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

IEEE P1721	SCOBPM	PAR Withdrawn
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Participation in the development of Society Educational Programs^(*)

Program name	Involvement of chapters and sections	Activity in the reporting period, including dates	Notes, attendance
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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	

Recommended candidates^(*)

Type (ADCOM, Fellow, Award –specify-)	First Name	Second Name	Family Name	Affiliation /Address	Motivation
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TC operating Plan: near-term plans for the upcoming year, including scheduled meetings, activities, and so on (max. 1000 char. Including spaces)

The TC is sponsoring and organizing the MeMeA 2022 in Giardini Naxos, Italy. TC-25 is one of the two TCs that realized a teaser video to recruit new members. A new version of the video is being prepared. A short paper for I&M Magazine has been submitted to I&M Magazine and published. 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. We plan to improve our visibility on the Society web site and on social media.

* Please add as many rows as needed

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 a new Procedures and Policies document has been submitted to Standards Association for approval.

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.

Three AdCom members-at-large are TC-25 members, the former TC-25 Chair is currently VP TSAC and the current Chair is currently VP Education.

* Please add as many rows as needed

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

* Please add as many rows as needed