

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)
April 2019	September 2020	

Website	Last update (mm/yy)
http://tc25.ieee-ims.org/tc25-home	10/17

TC Chair or co-Chairs

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	Date of election
Marco		Parvis	Politecnico Di Torino	40306639	+39 011 0904114	Marco.parvis@polito.it	2001-2019
Sergio		Rapuno	University of Sannio	41333078	+39 082 4305600	rapuno@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 appointment
Sabrina		Grassini	Politecnico di Torino, Italy			sabrina.grassini@polito.it	2020

TC Membership list^(*)

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	TC assignments (joining year)
Marco		Parvis	Politecnico di Torino, Italy			marco.parvis@polito.it	Chair to 2019
Sergio		Rapuno	University of Sannio, Italy			rapuno@unisannio.it	Chair from 2020

^{*} Please add as many rows as needed

Voicu	Groza	University of Ottawa, Canada	vgroza@uottawa.ca	Co-Chair
Pasquale	Daponte	University of Sannio, Italy	daponte@unisannio.it	Chairman of MeMeA Steering Committee
Gegorio	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@sup si.ch	Member
Kurt	Barbè	Free University of Bruxelles (VUB)	Kurt.Barbe@vub.ac.b e	Member
Miodrag	Bolic	University of Ottawa, Canada	mbolic@uottawa.ca	Member
Andrea	Cataldo	University of Salento, Italy	andrea.cataldo@unis alento.it	Member
Marcant onio	Catelani	University of Florence, Italy	marcantonio.catelani @unifi.it	Member
Max	Cortner	Boston Scientific, USA	Max.Cortner@bsci.co m	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	Member	
Jiabin	Jia	University of Edinburgh, UK	Jiabin.Jia@ed.ac.uk	Member	
Baki	Karaböce	TÜBİTAK ÜME, Turkey	baki.karaboce@tubitak.gov.tr	Member	
Anna	Maria Lucia	Lanzolla	Politecnico di Bari, Italy	lanzolla@misura.polibari.it	Member
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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	
Octavian	Postolache	Instituto Universitário de Lisboa and	octavian.postolache@gmail.com	Member	

		Instituto de Telecomunicações, Portugal		
Sreeramann	Rajan	Carleton University, Ottawa Canada	sreeraman@ieee.org	Member
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Annamaria	Varkonyi- Kozy	Obuda University, Hungary	varkonyi-koczy@uni- hobuda.hu	Member
Wuliang	Yin	University of Manchester, UK	Wuliang.Yin@manche ster.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.
- * 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 a more easy possibility to access raw data generated by the different

* Please add as many rows as needed

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)
23/05/2019	Face2Face	6	Yes	No	No	No
MeMeA steering committee in Istanbul 27/06/2019	Face2Face	13	Yes	No	No	No
MeMeA steering committee 05/06/2020	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
MeMeA 2016	15/05/16	18/05/16	all	X			Organizing entity
MeMeA 2017	07/05/17	10/05/17	all	X			Organizing entity
MeMeA 2018	11/06/18	13/06/18	all	X			Organizing entity
MeMeA 2019	26/06/19	28/06/19	all	X			Organizing entity
I2MTC 2019	20/05/19	23/05/19	23/05/19		X		Session organizing entity
MeMeA 2020	01/06/20	03/06/20	all	X			Organizing entity

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

Involvement in standard development^(*)

Standard	Working Group	Revision	Activity in the reporting period, including dates	Notes, attendance
IEEE P1721	SCOBPM		PAR Withdrawn	

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	several	several	Octavian Postolache and Jacob Scharcanski are very active DLs of the Society with many trips per year	

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 2021 in Neuchatel, Switzerland. TC-25 is one of the two TCs that realized a teaser video to recruit new members. A short paper for I&M Magazine has already been prepared and is planned for this year. Due to the change of I2MTC and MeMeA to virtual conferences in As in previous years at least two meetings were scheduled during I2MTC 2020 and during MeMeA 2020. Due to COVID-19 pandemic both conferences moved to virtual, therefore the meetings

^{*} Please add as many rows as needed

have been scheduled in teleconference. The first one has been held already. The second one will be held in the Fall. Any other meeting will be organized in teleconference when necessary.

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.

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 two of them are currently very active DLs of the Society.

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. Another paper has been planned to introduce the TC-25 interest fields.

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.

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