



TC ANNUAL REPORTING FORM

IMS Technical Committee

TC-7 Signals and Systems in Measurement

Reporting period

| Starting date (dd/mm/yy) | Ending date (dd/mm/yy) | Date of submission (dd/mm/yy) |
|--------------------------|------------------------|-------------------------------|
| 01/01/2024 | 31/12/2024 | 31/1/2024 |

Website

Last update (mm/yy)

<https://ieee-ims.org/technical-committee/tc-07>

TC Chair or co-Chairs

| First Name | Second Name | Family Name | Affiliation /Address | Membership number | Phone | e-mail address | Date of election |
|------------|-------------|-------------|---------------------------|-------------------|----------------|---------------------------|------------------|
| Ruqiang | | Yan | Xi'an Jiaotong University | 41600650 | +8613584054760 | yanruqiang@xjtu.edu.cn | |
| Shibin | | Wang | Xi'an Jiaotong University | | +868202944018 | angshibin2008@xjtu.edu.cn | |

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 |
|------------|-------------|-------------|----------------------|-------------------|-------|----------------|------------------|
|------------|-------------|-------------|----------------------|-------------------|-------|----------------|------------------|

TC Membership list^(*)

| First Name | Second Name | Family Name | Affiliation /Address | Membership number | Phone | e-mail address | TC assignments (joining year) |
|------------|-------------|-------------|---|-------------------|-------|----------------------|-------------------------------|
| Yuhua | | Cheng | University of Electronics Science and Technology of China | | | yhcheng@uestc.edu.cn | 2013 |
| Weihua | | Li | South China University of Technology | | | weihualee@gmail.com | 2012 |
| Qingbo | | He | Shanghai Jiaotong University | | | bhe@sjtu.edu.cn | 2011 |

* Please add as many rows as needed

| | | | | | | |
|---------|-----------|-------------------------------------|----------|------------------|-----------------------------|------|
| Lingfei | Mo | Southeast University | | | lfmo@seu.edu.cn | 2014 |
| Chuang | Sun | Xi'an Jiaotong University | | | ch.sun@xjtu.edu.cn | 2018 |
| Xingwu | Zhang | Xi'an Jiaotong University | | | xwzhang@mail.xjtu.edu.cn | 2018 |
| Susanna | Spinsante | Università Politecnica delle Marche | 41596910 | +39 071 220 4102 | s.spinsante@staff.univpm.it | 2022 |
| Grazia | Iadarola | Polytechnic University of Marche | 93782168 | +39 3887694408 | g.iadarola@staff.univpm.it | 2022 |
| Chengyu | Liu | Southeast University | 92815226 | +86-15952039150 | chengyu@seu.edu.cn | 2020 |

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

Promote the understanding of the discipline of Systems Engineering in the field of Instrumentation & Measurement;

Explore modeling and signal processing techniques which can greatly enhance test methodology, accuracy and efficiency through effective implementation of systems engineering;

Develop standards or implementation guides as the science develops;

Maintain liaison with other groups, societies, and standards activities working in the same area

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) |
| 01/11/2024 | Face2Face | 12 | 4 | | | TC meeting at ICSMD2024 |
| 14/06/2024 | Face2Face | 8 | 4 | | | TC meeting for organizing ICSMD2024 |
| 15/03/2024 | Face2Face | | | | | International Workshop on Big Data and AI-Driven Fault Diagnosis for Industrial Applications |

Minutes of the yearly meeting (separate file)¹:

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

| Name of the Event | Starting date (event) | Ending date (event) | Date Participation | Type of participation (Yes/No) |
|-------------------|-----------------------|---------------------|--------------------|--------------------------------|
|-------------------|-----------------------|---------------------|--------------------|--------------------------------|

¹ Yes/No, date of the yearly meeting;

* Please add as many rows as needed



| | (dd/mm/yy) | (dd/mm/yy) | (dd/mm/yy) | Sponsorship | Session | Tutorial | Other (specify) ² |
|-----------|------------|------------|------------|-------------|---------|----------|-------------------------------|
| I2MTC2024 | 20/05/2024 | 23/05/2024 | | | | | Review papers, chair sessions |
| ICSMD2024 | 31/10/2024 | 03/11/2024 | | Yes | | | Organizing conference |

Involvement in standard development^(*)

| Standard | Working Group | Revision | Activity in the reporting period, including dates | Notes, attendance |
|----------|---------------|----------|---|-------------------|
| N/A | | | | |

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

| Program name | Involvement of chapters and sections | Activity in the reporting period, including dates | Notes, attendance |
|--------------------|--------------------------------------|---|-------------------|
| IMS mentor program | | Mentoring one IMS student member, published one paper to IEEE TIM | |

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 |
|------------------|--------------------------|------------------------|---|--|
| Publications | | | Publish one paper in IEEE Instrumentation and Measurement Magazine | Terahertz technique: a non-destructive testing method for composite defect detection”, Vol. 27, No.9, pp.12-23, December 2024. |
| Teaching | 29/02/2024 | 17/05/2024 | Teaching in Intelligent Sensing and Measurement Technology for undergraduate at Xi’an Jiaotong University | 9 |

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

Recommended candidates^(*)

| Type (ADCOM, Fellow, Award –specify-) | First Name | Second Name | Family Name | Affiliation /Address | Motivation |
|--|------------|-------------|-------------|--------------------------------------|---|
| Award:J. Barry Oakes Advancement Award | Liuyang | | Zhang | Xi'an Jiaotong University | Dr. Liu is an excellent young scholar working in the area of NDT, especially for Tereheze sensing |
| Fellow | Weihuai | | Li | South China University of Technology | Nominating candidate for IEEE Fellow |

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

TC-7 will provide support for I2MTC 2025, organize ICSMD2025, ICEIOM2025 conference, help IMS for the Mentor Program, and work with local chapters to deliver lectures for student in China Universities.

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)

TC-7 will have regular meetings, organize annual conference on sensing, measurement and data analytics in the era of artificial intelligence (ICSMD), and also propose special sessions in I2MTC conference. TC-7 will also propose new standard on helicopter health monitoring.

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

Work together with TC-3 to organize International Conference on Sensing, Measurement and Data Analytics in the Era of Artificial Intelligence(ICSMD2024),Huanshan, China, October 31- November 3, 2024.

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

N/A

^{*} Please add as many rows as needed