



## TC ANNUAL REPORTING FORM

### IMS Technical Committee

TC- NONDESTRUCTIVE EVALUATION AND INDUSTRIAL INSPECTION (NDE&II)

### Reporting period

Starting date (dd/mm/yy)	Ending date (dd/mm/yy)	Date of submission (dd/mm/yy)
01/01/2019	01/10/2020	19/10/2020

**Website** <http://ieee-ims.org/technical-committees> **Last update (mm/yy)**  
2020

### TC Chair or co-Chairs

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	Date of election
Helena	Geirinhas	Ramos	Instituto Superior Técnico (IST), University of Lisbon /Av. Rovisco Pais,1 1049-001 Lisboa Portugal		+351914155030	hgramos@ist.utl.pt	May 2018
Zheng		Liu	The University of British Columbia, Canada				

### 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
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\* Please add as many rows as needed

## TC Membership list<sup>(\*)</sup>

1st Name	Family Name	Affiliation	Nationality	email address	Interests
Amitava	Mitra	National Metallurgical Laboratory	India	<a href="mailto:amitra@nmlindia.org">amitra@nmlindia.org</a>	Advanced Electromagnetic technique, System development
Anastasios	Skarlatos	CEA LIST	France	<a href="mailto:anastasios.skarlatos@cea.fr">anastasios.skarlatos@cea.fr</a>	eddy-current, material characterization, Barkhausen noise, modelling
Andrea	Cataldo	University of Salento - Dept. Engineering for Innovation	Italy	<a href="mailto:andrea.cataldo@unisalento.it">andrea.cataldo@unisalento.it</a>	microwaves, time domain reflectometry, frequency domain reflectometry, measurement systems development, dielectric characterization
Ankit	Vajpayee	ASNT, BINDT, CINDE, RSNDT, ACOSEND, Russell Group, PICA		<a href="mailto:avajpayee@russelltech.com">avajpayee@russelltech.com</a>	ECT, remote field technique (RFT), MFL and other (EM) techniques.
Anton	Duca	Politehnica University of Bucharest, EED	Romania	<a href="mailto:anton.duca@gmail.com">anton.duca@gmail.com</a>	Inverse Problems, Optimization, HPC
Antonello	Tamburrino		Italy	<a href="mailto:tamburrino@unicas.it">tamburrino@unicas.it</a>	EC, microwaves, modeling, system development, electrical resistance/impedance tomography, electromagnetic tomography
Antonello	Tamburrino	Michigan State University	USA	<a href="mailto:tamburr1@msu.edu">tamburr1@msu.edu</a>	EC, microwaves, modeling, system development, electrical resistance/impedance tomography, electromagnetic tomography
Antonio	Bruno	Pontificia Universidade Catolica do Rio de Janeiro	Brazil	<a href="mailto:acbruno@puc-rio.br">acbruno@puc-rio.br</a>	Magnetic Flux Leakage, Finite Element Modeling, Instrumentation.
Artur	Ribeiro	Instituto Superior Técnico	Portugal	<a href="mailto:arturir@ist.utl.pt">arturir@ist.utl.pt</a>	
Bin	Gao	University of Electronic Science and Technology of China	China	<a href="mailto:bingao831210@gmail.com">bingao831210@gmail.com</a>	thermography, eddy current, ultrasound, system development, signal processing
Bo	Feng	Instituto Superior Técnico	Portugal	<a href="mailto:bofeng@tecnico.ulisboa.pt">bofeng@tecnico.ulisboa.pt</a>	guided ultrasonic wave testing; eddy current testing; magnetic flux leakage testing
Cesar	Camerini	Federal University of Rio de Janeiro	Brazil	<a href="mailto:cgcamerini@metalmat.ufri.br">cgcamerini@metalmat.ufri.br</a>	Eddy Current Testing, Electromagnetic Testing and System Development.
Chandra	Angani	Dept. of Electr and Physics, GITAM Deemed to be University	India	<a href="mailto:angani.cs@gmail.com">angani.cs@gmail.com</a>	Eddy Current Testing, System development, Sensor Development, Magnetic Flux Leakage
Christophe	Reboud	Non Destructive Testing Department, CEA LIST Institute	France	<a href="mailto:Christophe.REBOUD@cea.fr">Christophe.REBOUD@cea.fr</a>	eddy current, Xray, computed tomography, material characterization, signal processing, simulation, machine learning, diagnostic
Clara Johanna	Pacheco	Federal University of Rio de Janeiro	Brazil	<a href="mailto:cjpacheco@metalmat.ufri.br">cjpacheco@metalmat.ufri.br</a>	eddy current, system development, advanced sensors, materials characterization, monitoring of mechanical structures.
Dagmar	Faktorová	University of Zilina	Slovak Republic	<a href="mailto:dagmar.faktorova@fel.uniza.sk">dagmar.faktorova@fel.uniza.sk</a>	microwaves, eddy current, modeling
Dario	Pasadas	Instituto Superior Técnico	Portugal	<a href="mailto:dariopasadas1@gmail.com">dariopasadas1@gmail.com</a>	
David	Forsyth	TRI/Austin	USA	<a href="mailto:dforsyth@tri-austin.com">dforsyth@tri-austin.com</a>	
David	Pommerenke	Missouri University of Science & Technology (S&T)	USA	<a href="mailto:davidjp@mst.edu">davidjp@mst.edu</a>	
Diogo Elói	Aguiam	International Iberian Nanotechnology Laboratory	Portugal	<a href="mailto:diogo.aguiam@tecnico.ulisboa.pt">diogo.aguiam@tecnico.ulisboa.pt</a>	eddy current, RF, microwaves, modeling, system development, signal processing, microscopy, optical, nanofabrication, nanoinspection, nanoimprint, online monitoring, real-time inspection
Dominik	Kukla	Institut of fundamental Technological Resarch	Poland	<a href="mailto:dkukla@ippt.gov.pl">dkukla@ippt.gov.pl</a>	tube inspection(ECT, RFT, NFT),thickness and hardness of layers with EC, early identification and location of damage and fatigue based on EC, and optical technique, like DIC and ESPI

\* Please add as many rows as needed

Donnel	Kristen	Missouri University of Science & Technology (S&T)	USA	<a href="mailto:kmdgfd@mst.edu">kmdgfd@mst.edu</a>	
Fei	Du	Xiamen University	China	<a href="mailto:dufei01100@sina.com">dufei01100@sina.com</a>	
Gerd	Dobman	Fraunhofer Institute for Nondestructive Testing IZFP	Germany	<a href="mailto:Gerd.Dobmann@t-online.de">Gerd.Dobmann@t-online.de</a>	eddy current, ultrasound, microwaves, radiography, modeling, system development for defect-detection and -sizing, materials characterization and stress-analysis
Grzegorz	Psuj	University of Technology, Szczecin	Poland	<a href="mailto:gpsuj@zut.edu.pl">gpsuj@zut.edu.pl</a>	electromagnetic NDT, stress and fatigue evaluation, MFL, data mining and fusion algorithms for the need of multi-source NDT inspection systems
Guglielmo	Rubinacci	Universita' degli Studi di Napoli Federico II	Italy	<a href="mailto:rubinacci@unina.it">rubinacci@unina.it</a>	Electromagnetic Non Destructive Evaluation and Testing, mainly Magneto-quasi stationary techniques and applications
Guiyun	Tian	University of Newcastle	UK	<a href="mailto:g.y.tian@newcastle.ac.uk">g.y.tian@newcastle.ac.uk</a>	
Guiyun	Tian	University of Newcastle	UK	<a href="mailto:g.y.tian@ncl.ac.uk">g.y.tian@ncl.ac.uk</a>	
Helena	Ramos	Instituto Superior Técnico	Portugal	<a href="mailto:hgramos@ist.utl.pt">hgramos@ist.utl.pt</a>	
Henning	Heuer	Fraunhofer IKTS and Technische Universität Dresden	Germany	<a href="mailto:Henning.Heuer@ikts-md.fraunhofer.de">Henning.Heuer@ikts-md.fraunhofer.de</a>	EC, ultrasound, microwaves, radiography, system development, robotic, datafusion
Ilham Mukriz	Zainal	Malaysian Nuclear Agency	Malaysia	<a href="mailto:mukriz@nuclearmalaysia.gov.my">mukriz@nuclearmalaysia.gov.my</a>	EC, eddy current thermography, pulsed eddy current, modeling, electromagnetic
Imad	Al-Qadi	University of Illinois at Urbana-Champaign,	USA	<a href="mailto:alqadi@uiuc.edu">alqadi@uiuc.edu</a>	ground penetrating radar
James	Smith	Idaho National Laboratory / BEA	USA	<a href="mailto:James.Smith@INL.Gov">James.Smith@INL.Gov</a>	Waves: Optical, ultrasonic, Electromagnetic, RFID
Jinyi	Lee	Dept. of Electronic Engineering, CHOSUN UNIVERSITY	Korea	<a href="mailto:jinyilee@chosun.ac.kr">jinyilee@chosun.ac.kr</a>	System Development of Eddy Current, Magnetic Flux Leakage, Magnetic Camera, Magneto-Optical Method and Laser Displacement], [Application in Nuclear Power Plant, Automobile, Aerospace, Military and Steel Manufacturing]
Jose Luis	Lanzagorta	Ik4-Ideko	Spain	<a href="mailto:illanzagorta@ideko.es">illanzagorta@ideko.es</a>	EC, Ultrasound, Thermography, Magnetic Particle Inspection, automation, X-Ray diffraction, modeling
José Pedro	Sousa	ISQ	Portugal	<a href="mailto:jpsousa@isq.pt">jpsousa@isq.pt</a>	eddy current, ultrasound, radiography, development of inspection systems, automated inspections
Kiyoshi	Koyama	Nihon University	Japan	<a href="mailto:koyama.kiyoshi@nihon-u.ac.jp">koyama.kiyoshi@nihon-u.ac.jp</a>	ECT
Klara	Capova	University of Žilina	Slovakia	<a href="mailto:Klara.capova@fel.uniza.sk">Klara.capova@fel.uniza.sk</a>	
Ladislav	Janousek	KTEBI	Slovakia	<a href="mailto:ladislav.janousek@fel.uniza.sk">ladislav.janousek@fel.uniza.sk</a>	eddy current, electromagnetic methods, modelling, inverse problems
Lalita	Udpa	Michigan State University	USA	<a href="mailto:udpal@egr.msu.edu">udpal@egr.msu.edu</a>	
Lindberg	Gonçalves	Federal University of Ceara	Brazil	<a href="mailto:lindberg@fisica.ufc.br">lindberg@fisica.ufc.br</a>	Pattern recognition techniques applied to nde testing and also modeling in ultrasound
Luigi	Ferrigno	Università degli Studi di Cassino e del Lazio Meridionale	Italy	<a href="mailto:ferrigno@unicas.it">ferrigno@unicas.it</a>	eddy current and ultrasound
Lukasz Jacek	Pieczonka	AGH- University of Science and Technology	Poland	<a href="mailto:lukasz.pieczonka@agh.edu.pl">lukasz.pieczonka@agh.edu.pl</a>	ultrasound, nonlinear ultrasound, active thermography, modeling, system development
Mahesh R.	Perumal	Indian Institute of Technology Madras	India	<a href="mailto:mrp0559@gmail.com">mrp0559@gmail.com</a>	Eddy current testing, modeling, system development
Marco	Laracca	University of Cassino and Southern Lazio	Italy	<a href="mailto:m.laracca@unicas.it">m.laracca@unicas.it</a>	ECT; Ultrasound, sensor development and testing, metrological characterization, signal processing
Mariana	Burrowes	Federal University of Rio de Janeiro	Brazil	<a href="mailto:mariana@metalmat.ufri.br">mariana@metalmat.ufri.br</a>	ultrasonic testing, reliability studies, modelling, NDT simulation, Modelled POD

\* Please add as many rows as needed

					curves, Simulated POD curves, statistical analysis applied on NDT and data analysis
Mirosław	Witos	Air Force Institute of Technology (AFIT)	Poland	<a href="mailto:mirosław_witos@o2.pl">mirosław_witos@o2.pl</a>	electromagnetic methods of NDT and SHM, SHM, measurement, signal analysis, expert systems, active control of material fatigue, integration of NDT and SHM method
Mohammad	Ghasr	Missouri University of Science and Technology	USA	<a href="mailto:mtg7w6@mst.edu">mtg7w6@mst.edu</a>	Microwave and millimeter-wave NDT, Real-time imaging systems
Mohammad	Ghasr	Missouri University of Science & Technology (S&T)	USA	<a href="mailto:M.T.Ghasr@mst.edu">M.T.Ghasr@mst.edu</a>	Microwave and millimeter-wave NDT, Real-time imaging systems
Mojtaba	Fallahpour			<a href="mailto:mojtabafallahpour@gmail.com">mojtabafallahpour@gmail.com</a>	
Mónica P.	Arenas	Federal University of Rio de Janeiro/Université libre de Bruxelles	Brazil	<a href="mailto:monicarenas4@gmail.com">monicarenas4@gmail.com</a>	eddy current, ultrasound, modeling, system development, real time measurements, machine learning
Naoya	Kasai	Yokohama National University	Japan	<a href="mailto:n-kasai@ynu.ac.jp">n-kasai@ynu.ac.jp</a>	Eddy current testing, Magnetic flux leakage testing, Probe & system development, Sensor with optic fiber
Natalia	Sergeeva-Chollet	CEA LIST, Centre de Sacalay	France	<a href="mailto:natalia.sergeeva-chollet@cea.fr">natalia.sergeeva-chollet@cea.fr</a>	eddy-current, material characterization, magnetoresistive sensors
Noritaka	Yusa	Graduate School of Engineering, Tohoku University	Japan	<a href="mailto:noritaka.yusa@gse.tohoku.ac.jp">noritaka.yusa@gse.tohoku.ac.jp</a>	electromagnetic nondestructive evaluation, eddy current, microwave, probability of detection
Octavian	Postolache		Portugal	<a href="mailto:octavian.postolache@gmail.com">octavian.postolache@gmail.com</a>	
Peng	Xu	Nanjing University of Aeronautics and Astronautics	China	<a href="mailto:xupeng@nuaa.edu.cn">xupeng@nuaa.edu.cn</a>	eddy current testing, MFL, defect evaluation
Pierre-Yves	Joubert	IEF, CNRS UMR 8622, Univ Paris	France	<a href="mailto:pierre-yves.joubert@u-psud.fr">pierre-yves.joubert@u-psud.fr</a>	eddy current sensors, eddy current imaging devices, electromagnetic sensors, electromagnetic NDE of materials including electrically conducting material dielectric material, organic material. Non contact sensing, sensor array, flexible sensors
Pingjie	Huang	Zhejiang University	China	<a href="mailto:huangpingjie@zju.edu.cn">huangpingjie@zju.edu.cn</a>	eddy current, ultrasound, terahertz science and technology, modeling, data mining, computer control system, system development, etc.
Radislav	Smid	Czech Technical University in Prague	Czech Republic	<a href="mailto:smid@fel.cvut.cz">smid@fel.cvut.cz</a>	EC, non-linear ultrasound, electrical impedance tomography, ultrasonic guided waves, SHM, signal processing&analysis
Reza	Zoughi	Missouri University of Science & Technology (S&T)	USA	<a href="mailto:zoughir@mst.edu">zoughir@mst.edu</a>	Microwave and millimeter wave NDT&E
Robert	Ward	Baker Hughes General Electric	USA	<a href="mailto:robert_ward@ge.com">robert_ward@ge.com</a>	ultrasound and eddy current devices, probes and total solutions
Roberto	Miorelli	CEA LIST, Centre de Sacalay	France	<a href="mailto:roberto.miorelli@cea.fr">roberto.miorelli@cea.fr</a>	electromagnetics modeling, ML & AI, magnetostatic, EC, microwaves, terahertz, infrared thermography, inversion
Roberto	Montanini	University of Messina	Italy		
Rosario	Morello	University Mediterranea of Reggio Calabria	Italy	<a href="mailto:rosario.morello@unirc.it">rosario.morello@unirc.it</a>	active and passive thermography; pulsed thermography; lockin-thermography; eddy current thermography
Ruqiang	Yan	Xi'an Jiaotong University	China	<a href="mailto:ruqiang@seu.edu.cn">ruqiang@seu.edu.cn</a>	Structural Health Monitoring, system modeling, signal processing
Sergey	Ivashov	Bauman Moscow State Technical	Russia	<a href="mailto:sivashov@rslab.ru">sivashov@rslab.ru</a>	microwaves (holographic subsurface radars)
Serdar	Savas	GE Marmara Technology Center	Turkey	<a href="mailto:serdar.savas@ge.com">serdar.savas@ge.com</a>	
Samir	Trabelsi	US National Poultry Research Center	USA	<a href="mailto:Samir.Trabelsi@ARS.USDA.GOV">Samir.Trabelsi@ARS.USDA.GOV</a>	Ultrasonic, Eddy Current, Computed Tomography, Infrared, Digital Thread,

\* Please add as many rows as needed

					Automation, ADR, AI in aerospace
Satish	Udpa	Michigan State University	USA	<a href="mailto:udpa@egr.msu.edu">udpa@egr.msu.edu</a>	Instr, NDE, Magnetostatic Methods, EC, Microwave Methods, Radiography, Ultrasound, Image and Signal Processing, Pattern Recognition
Shuncong	Zhong	Fuzhou University	China	<a href="mailto:sczhong@fzu.edu.cn">sczhong@fzu.edu.cn</a>	terahertz pulsed imaging, optical coherence tomography, ultrasound, EC, infrared thermography
Songling	Huang	Tsinghua University	China	<a href="mailto:huangsling@tsinghua.edu.cn">huangsling@tsinghua.edu.cn</a>	oil and gas pipeline defects in-line testing, magnetic flux leakage testing, electromagnetic ultrasonic guided wave testing, and eddy current testing
Telmo	Santos	Universidade Nova de Lisboa	Portugal	<a href="mailto:telmo.santos@fct.unl.pt">telmo.santos@fct.unl.pt</a>	EC;EC probes design;Air coupled ultrasound;Termography;Material characterization;Numerical simulation for NDT;system development
Theodoros	Theodoulidis	University of Western Macedonia, Depart Mechanical Eng	Greece	<a href="mailto:theodoul@uowm.gr">theodoul@uowm.gr</a>	EC, modeling, industrial nondestructive inspections
Tiago	Rocha	Instituto de Telecomunicações	Portugal	<a href="mailto:t.rocha@gmail.com">t.rocha@gmail.com</a>	
Timothy	Bigelow	Center for Nondestructive Evaluation, Iowa State University	USA	<a href="mailto:bigelow@iastate.edu">bigelow@iastate.edu</a>	Ultrasound; Eddy Current; Microwave; In-line monitoring of metal additive manufacturing technologies
Joseph (Toby)	Case		USA	<a href="mailto:toby.case@aero.org">toby.case@aero.org</a>	ultrasound, microwaves, radiography, reconstruction, system development, signal and image processing
Tomasz	Chady	West Pomeranian University of Technology	portugal	<a href="mailto:tchady@zut.edu.pl">tchady@zut.edu.pl</a>	eddy current, multifrequency excitation and spectrogram ECT, digital radiography, THz inspection, system development, ADR, inverse problem, MFLT, residual magnetization, Barkhausen noise, composite inspection, modeling.
Toshihiro	Ohtani	Shonan Institute of Technology	Japan	<a href="mailto:ohtani@mech.shonan-it.ac.jp">ohtani@mech.shonan-it.ac.jp</a>	ultrasound
Toshiyuki	Takagi	Institute of Fluid Science, Tohoku University	Japan	<a href="mailto:takagi@ifs.tohoku.ac.jp">takagi@ifs.tohoku.ac.jp</a>	
Wuliang	Yin	University of Manchester	UK	<a href="mailto:wuliang.yin@manchester.ac.uk">wuliang.yin@manchester.ac.uk</a>	Eddy current;Tomography;Magnetic;Electromagnetic modelling
Weixi	Chen	Tohoku University	Japan	<a href="mailto:wchen@karma.gse.tohoku.ac.jp">wchen@karma.gse.tohoku.ac.jp</a>	
Weijuan	Wang	Japan Power Engineering and Inspection Corporation	Japan	<a href="mailto:cheng-weiying@japeic.or.jp">cheng-weiying@japeic.or.jp</a>	eddy current, radiography, modeling, system development, etc.
William (Cy)	Wilson	NASA Langley Research Center	USA	<a href="mailto:william.c.wilson@nasa.gov">william.c.wilson@nasa.gov</a>	microwaves, Surface acoustic waves, and SHM, but I am interested in all NDE; thermography, Terahertz, EC, ultrasound, microwaves, radiography, modeling, system development
Xiaokang	Yin	China University of Petroleum (East China)	China	<a href="mailto:xiaokang.yin@upc.edu.cn">xiaokang.yin@upc.edu.cn</a>	SHM; signal processing; finite element
Yang	Ju	Nagoya University	Japan	<a href="mailto:ju@mech.nagoya-u.ac.jp">ju@mech.nagoya-u.ac.jp</a>	Microwaves
Yimming	Deng	Michigan State University	USA	<a href="mailto:dengyimi@egr.msu.edu">dengyimi@egr.msu.edu</a>	electromagnetic NDE, acoustic methods, diagnosis and prognosis, data analytics, modeling
Yunze	He	National University of Defense Technology	China	<a href="mailto:hejicker@gmail.com">hejicker@gmail.com</a>	eddy current, thermography, acoustic emission, system development, etc.
Zandong	Han	Tsinghua University	China	<a href="mailto:hanzd@tsinghua.edu.cn">hanzd@tsinghua.edu.cn</a>	eddy current, ultrasound, testing instrument
Zheng	Liu	University of British Columbia	Canada	<a href="mailto:zheng.liu@ieee.org">zheng.liu@ieee.org</a>	

\* Please add as many rows as needed

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

The Nondestructive Evaluation and Industrial Inspection (TC-NDE&II) Technical Committee will concentrate on the following scopes:

- Develop, promote, and support research and development efforts on methods and systems for design, optimization and characterization of nondestructive evaluation and industrial inspection measurements, instruments, devices and applications.
- Promote the development and applications of cutting-edge nondestructive evaluation techniques for materials characterization and structural and industrial inspection.
- Promote and support the development of relevant standards for different Nondestructive Evaluation and Industrial Inspection techniques.
- Become the liaison, facilitate and promote collaboration among the users and developers of different Nondestructive Evaluation and Industrial Inspection (NDE&II) techniques and relevant IMS Technical Committees (TC), other IEEE Societies, councils and OUs.

## TC meetings in the reporting period<sup>(\*)</sup>

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)
21/5/2019 (I2MTC)	Face2Face	15	yes	yes	no	
May 2020 (I2MTC)	Online	6	yes	no	no	

## Minutes of the yearly meeting (separate file)<sup>1</sup>:

## Participation in Society sponsored Events (Conferences, Symposia, Workshops)<sup>(\*)</sup>

Name of the Event	Starting date (event) (dd/mm/yy)	Ending date (event) (dd/mm/yy)	Date Participation (dd/mm/yy)	(Yes/No)	Type of participation			
					Sponsorship (specify) <sup>2</sup>	Session	Tutorial	Other
I2MTC 2019	20/5/2019	23/5/2019			Yes		Special Session organization	
I2MTC 2020	May 2020				No		Special Session organization	

<sup>1</sup> Yes/No, date of the yearly meeting;

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

\* Please add as many rows as needed

TECHNOLOGIES FOR EVERYDAY LIFE	26/7/2019	26/7/2019	26/7/2019		Organized by IT-IUL, ISCTE-IUL and IEEE IMS Portugal Chapter
INSTRUMENTATION AND MEASUREMENT IN EVERYDAY LIFE	27/6/2019	27/6/2019	27/6/2019	Yes	IEEE IMS PT, IEEE IMS TC-13, IEEE IMS-TC1
1ST SMARTLIFE	14/9/2020	14/9/2020	14/9/2020	No	IEEE IMS PT, IEEE IMS TC-13, IEEE IMS-TC1

**Involvement in standard development<sup>(\*)</sup>**

Standard	Working Group	Revision	Activity in the reporting period, including dates	Notes, attendance
NDE Communication			Tentative organization of a WG	Several remote meetings

**Participation in the development of Society Educational Programs<sup>(\*)</sup>**

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)<sup>(\*)</sup>**

Type of activity	Starting date (dd/mm/yy)	Ending date (dd/mm/yy)	Activity in the reporting period	Notes, attendance
Promotional Video			Not publish due to lack of funding	

<sup>\*</sup> Please add as many rows as needed

**Recommended candidates<sup>(\*)</sup>**

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-NDE&II aims to provide the focus for its members' technical interests. It is therefore paramount to invite and encourage members to participate. Thus, TC-NDT&E can provide collaboration opportunities superheading the growth of instrumentation and measurement within the nondestructive testing and evaluation research and development area. The TC-NDE&II is a structure for IEEE IMS members working on sensors and actuators development and testing, measurement techniques, signal processing, microwaves, electromagnetic field, ultrasounds (and others) to join and focus their activities in the nondestructive inspection innovation and technical development.

Since the approval by the IEEE Instrumentation and Measurement (I&M) Society at the AdCom Spring Meeting in May 2018 of the Technical Committee-1 (TC-1) on “Nondestructive Evaluation and Industrial Inspection (NDE&II)” several activities took place aligned with its objectives. In the near future TC- NDE&II will continue:

- One or two special sessions on nondestructive testing in every International Instrumentation and Measurement Technology Conference (I2MTC), the flagship conference of the IEEE Instrumentation and Measurement Society
- At least at every International Instrumentation and Measurement Technology Conference (I2MTC), the TC-NDE&II organizes face-to-face meeting. Unfortunately, in 2020 due to the Covid 19 pandemic situation this wasn't possible to achieve.
- Tutorials at a national (or even more limited) level are organized to promote and encourage research in the field.
- Representation during International Workshops to promote and facilitate the exchange of knowledge between participants
- Meetings already took place for the formation of a Working Group to forecast the role TC- NDT&E can play in the development of IEEE Standards with a major impact in some industries

<sup>\*</sup> 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)**

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As any Technical Committee of the IEEE Instrumentation and Measurement Society, the Technical Committee on Nondestructive Testing and Evaluation (TC-NDE&II) is expected to define and implement the technical directions of the society.

- *Great challenges for new instrumentation and new measurement techniques* - Recently, NDT&E has seen unprecedented development and significant growth through advanced instrumentation and materials as well. The rapid technological progress during the past half-century, especially in areas like aerospace, pipelines, bridges, nuclear plants or refineries, where the high level of risk involved and strict precautions are mandatory, together with nowadays ability to interface with computers, has driven a dramatic impact in NDT technology. NDT became, in fact, the fastest growing technology from the standpoint of uniqueness and innovation.
  - *Societal importance of nondestructive testing and evaluation* - Nondestructive testing and evaluation has a tremendous impact in public security and safely technology development. NDT techniques can be used to monitor the integrity of an item or structure throughout its design life. NDT&E is paramount in everyday life and is necessary to assure safety and reliability.
  - *To provide technical resources and collaboration opportunities* – there are a large group of scientists and students belonging to the IEEE Instrumentation and Measurement Society, which have a recognized proficiency in the specific field of nondestructive testing and evaluation. Currently, one or two special sessions on nondestructive testing take place in every International Instrumentation and Measurement Technology Conference (I2MTC), the flagship conference of the IEEE Instrumentation and Measurement Society, dedicated to advances in measurement methodologies, measurement systems, instrumentation, and sensors in all areas of science and technology, to attest the growing importance of the subject. By pursuing TC best practices, it is expected that a new TC on non destructive testing and evaluation, will be an important benefit of membership, allowing further collaboration and communication within a subset of I&M practitioners.
  - *Absence of an existing Technical Committee* – at present, there isn't any technical committee on nondestructive testing and evaluation able to synergize efforts to pursue development and research in this area and for presenting multiple points of view.
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**TC convergence, synergy, cooperation with other TC, from I&M or other societies (max. 1000 char. Including spaces)**

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Being nondestructive testing and evaluation an interdisciplinary and multidisciplinary, possible collaborations are foreseen with other TC including:

- TC-6 - Emerging Technologies in Measurements;
- TC-7 - Signals And Systems in Measurement;
- TC-9 - Sensor Technology;
- TC-17 - Materials in Measurements;
- TC-19 - Imaging Measurements and Systems;
- TC-20 - Transportation Systems in Measurement.

Collaboration can include special issues publications.

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\* Please add as many rows as needed

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The membership of the new TC-NDT&E is expected to be diverse too, again due to the broad NDT&E facet.

Other benefits may include:

- Invited sessions organization within IMS co-sponsored conferences and workshops;
  - Special Issues for IEEE publication
  - Publications of books
  - Organizing Special Sessions in IEEE IMS co-sponsored conferences
  - Other member development activities
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**Comments/Suggestions (max. 1000 char. Including spaces)**

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