WOCSDICE-2017 PRELIMINARY PROGRAMME

	MONDAY
09:00-09:15	Opening Ceremony
09:15-09:45	Invited A
09:45-11:00	Topic 7 (5 talks)
11:00-11:30	Coffee Break
11:30-12:00	Invited B
12:00-13:30	Topic 1 (6 talks)
13:30-15:00	LUNCH
15:00-15:30	Invited C
15:30-16:45	Topic 2 (5 talks)
16:45-17:00	Coffee Break
17:00-17:30	Invited D
17:30-18:00	Topic 7 (2 talks)
20:00-22:00	Welcome Reception

	TUESDAY	
09:00-09:30	Invited E	City Sightseeing
09:30-11:00	Topic 4 (6 talks)	
11:00-11:30	Coffee Break	
11:30-12:00	Invited F	
12:00-13:30	Topic 5 (6 talks)	
13:30-15:00	LUNCH	
15:00-15:30	Invited G	
15:30-17:00	Topic 3 (6 talks)	
17:00-17:15	Coffee Break	
17:30-20:30	Social Event	
20:30-22:30	Gala Dinner	

City Sightseeing (only for Accompanying Persons)

	WEDNESDAY
09:00-09:30	Invited H
09:30-10:00	Topic 5 (2 talks)
10:00-11:00	POWERBASE-Topic 6 (4 talks)
11:00-11:30	Coffee Break
11:30-13:45	POWERBASE-Topics 1&4 (9 talks)
13:45-14:00	Closing Ceremony
	LUNCH

SPECIAL SESSION - POWERBASE Project
Topics 1, 4 & 6
European Union's Horizon 2020 research and innovation programme

Topic 1	→	III-V Devices & Circuits	→	Invited B
Topic 2	→	2D & Graphene	→	Invited C
Topic 3	→	Device modelling	→	Invited G
Topic 4	→	Process & Characterization	→	Invited H
Topic 5	→	Applications	→	Invited E, F
Topic 6	→	Reliability & Packaging		-
Topic 7	→	Novel Devices & Circuits	→	Invited A, D

MONDAY

09:00-09:15	**Opening Ceremony**	
09:15-09:45	**Invited A** **Michael Shur - THz devices using graphene**	
09:45-11:00	**Novel device and circuit concepts (Topic 7 - 5 talks)**	
	V Sirkeli, O. Yilmazoglu, H. Hartnagel and F. Küppers	Room-temperature terahertz quantum cascade lasers based on ZnSe/ZnMgSe
	O. Tizno, A. Marshall and M. Hayne	Room-temperature, non-volatile charge storage in III–V semiconductor memory cells
	S. Das, K. Ghosh, R. Sarkar, S. Dutta, S. Mukherjee, S. Ganguly and A. Laha	Epitaxial lanthanide oxide on III-Nitride substrates for high power MOS HEMT application
	J.A. Delgado, E. Javadi, V. Clericò, K. Fobelets, E. Diez, et. al.	Experimental and theoretical studies of Sub-THz detection using strained-Si MODFETs
	D. Shahin, T. Anderson, V. Wheeler, M. Tadjer and A. Christou	ALD High-k ZrO2 Dielectrics for Wide and Ultra-Wide Bandgap Semiconductor Devices
11:00-11:30	**Coffee Break**	
11:30-12:00	**Invited B** **José L. Jiménez - Current Understanding of Basestation Linearity on GaN Power amplifiers and the influence of starting material**	
12:00-13:30	**Compound semiconductor-based devices and their circuits including wide bandgap semiconductor (Topic 1 - 6 talks)**	
	K Horio and H. Hanawa	Analysis of Breakdown Voltage Enhancement in AlGaN/GaN HEMTs with Double Passivation Layers Using a High-k Dielectric
	C. Koller, G. Pobegen, C. Ostermaier, M. Huber and D. Pogany	Leakage and Voltage Blocking Behavior of Carbon-Doped GaN Buffer Layers
	E. Erofeev and I. Fedin	High threshold voltage self-aligned MIS-gated GaN transistors for power electronics
	S. Riedmüller, J. Grünenpütt and H. Blanck	Influence of Fe buffer doping profile on InAlN/GaN HEMTs
	P. Kurpas, E. Bahat-Treidel, O. Hilt, R.-S. Unger, N. Volkmer, et. al.	β-Ga2O3 (100) MISFETs for power electronics applications
	A. Debald, S. Kotzea, M. Heuken, H. Kalisch and A. Vescan	High-Quality n-GaN Drift Layers for Quasi-Vertical GaN- on-Sapphire Schottky Diodes grown by MOVPE
13:30-15:00	**LUNCH**	
15:00-15:30	**Invited C** **Pil Sung Park - Vertical transport in Metal/Graphene/AlGaN/GaN structure**	
15:30-16:45	**Two-dimensional layered (2D) and Graphene devices and their materials (Topic 2 - 5 talks)**	
	E. Mercado, A. Goodyear, J. Moffat, M.mCooke and R. Sundaram	Characterization of disorder in MoS2 fabrication processes using Raman Metrology
	P.C. Feijoo, F. Pasadas, J.M. Iglesias, MªJ. Martín, R Rengel, et al.	Scalability of graphene transistors supported on h-BN targeting RF applications
	Mª M. Giangregorio, G.V. Bianco, G. Bruno, J. Humlicek and L Maria	Graphene hybrids for optical gas- and bio-sensing
	M.F. Romero, A. Boscá, J. Martínez, J. Pedrós, T. Palacios and F. Calle	Effects of mist exposure on SiN-passivated AlGaN/GaN-based MISHEMTs with and without graphene top layer
	D. Jameel, J. Felix, M. Aziz, N. Al Saqri, D. Taylor, M. Henini	Electrical properties of sulfonated polyaniline (SPAN)/GaAs hybrid heterostructures grown on (100) and (311)B GaAs planes
16:45-17:00	**Coffee Break**	
17:00-17:30	**Invited D** **Timothy Grotjohn - Diamond Electronic Device Technology**	
17:30-18:00	**Novel device and circuit concepts (Topic 7 - 2 talks)**	
	S. Kyatam, L.N. Alves and J.-C. Mendes	Thermal analysis of high power light emitting diodes mounted on diamond layered PCB
	D. Mukherjee, L.N. Alves and J.-C. Mendes	Diamond-SiC heterojunctions – the influence of argon flow on the electrical behavior of CVD diamond
20:00-22:00	**Welcome Reception**	

TUESDAY

09:00-09:30	**Invited E** **Yuanxun Ethan Wang - Non-Reciprocal, Parametric Amplification of Electromagnetic Waves for Future Generation of RF Front-Ends**		**Tourist City Sightseeing Bus (only for Accompanying Persons)**
09:30-11:00	**Device process and characterization (Topic 4 - 6 talks)**		
	Y. Lebiadok, A. Shalayeva and D. Kabanau	Efficiency of AlGaAs/GaAs Quantum Well Infrared Photodetectors and Vacancies in the Heterointerface	
	M. Mikulics, H. Hartdegen, D. Gregusova, D. Donoval, and P.Kordos	Residual stress in recessed-gate AlGaN/GaN heterostructure field-effect transistors	
	M Wośko, T. Szymański, B. Paszkiewicz, R. Paszkiewicz	AlN/GaN superlattices for enhancement of epitaxially grown AlGaN/GaN/Si(111) HEMT's structures performance	
	D. Haško and F. Uherek	Optical and probe microscopy investigations of materials for hybrid photonics	
	R. Caulmilone, Y. Baines, F. Levy, E. Guiot and T. Mrotzek	GaN Based Advanced substrates by Smart-CutTM for power devices	
	R. Rodríguez, B. González, J. Garcia and A. Nunez	DC characteristics with substrate temperature for GaN on Si MOS-HEMTs	
11:00-11:30	**Coffee Break**		
11:30-12:00	**Invited F** **Peter Offermans - GaN based gas sensing**		
12:00-13:30	**Applications of devices and structures (Topic 5 - 6 talks)**		
	A. Stolz, L. Considine, R.W. Purnamaningsih, et al. and D. Pavlidis	III-Nitride Based Plasmonic Optical Modulators and Splitters	
	A. Gonzalo, A.D. Utrilla, A. Arruebo, D.F. Reyes, V. Braza et al.	Strain-balanced type-II GaAsSb/GaAsN superlattices for efficient multi-junction solar cells	
	D. Kabanau and Y. Lebiadok	GaInAsSb LEDs for measurement of water concentration in oil and petroleum products	
	D. Kabanau, Y. Lebiadok and A. Shalayeva	InAs/InAsSb/InAsSbP LEDs for carbon monoxide and dioxide concentration measurement	
	D. Shabrov, K. Boris, K. Vladimir and L. Yhor	Powerful laser diode matrixes for active vision systems	
	N. Trivellin, M. Buffolo, M. Meneghini, E. Zanoni and G. Meneghesso	White light source based on GaN Laser Diode	
13:30-15:00	**LUNCH**		
15:00-15:30	**Invited G** **Benjamin Iñiguez - Physically-Based compact modeling of AlGaN/GaN HEMTs**		
15:30-17:00	**Device modelling (Topic 3 - 6 talks)**		
	A.Chvála, J.Marek, P.Príbytný, J.Kováč, S.L.Delage, J.C. Jacquet, D.Donoval	Thermal Analysis of Multifinger Power HEMTs Supported by 3-D Simulation	
	J.-Y. Duboz, E. Frayssinet, S. Chenot, M Alkhalfioui and J.-L. Reverchon	Avalanche in GaN and AlGaN	
	W.E Muhea, F.M. Yigletu and B. Iniguez	DC model for AlGaN/GaN HEMTs with the effect of polarization	
	M. Uren, S. Karboyan and M. Kuball	Simulation of GaN Power Transistors: A "Leaky Dielectric" Model	
	V. Letka and A. Marshall	Modelling and measurement of bandgap behavior in MWIR InAs/InAs(0.82)Sb(0.18) strained-layer superlattices	
	Y. Nishidate, I. Khmyrova, Y. Kholopova, E. Polushkin, A. Kovalchuk et al.	Modeling of InGaN/GaN Light-Emitting Diodes with Designed p-Electrode	
17:00-17:15	**Coffee Break**		
17:30-20:30	**Excursion to the historic centre of the town (visit to the Columbus Museum) and Tour Sightseeing around Bandama crater and Arucas village**		
20:30-22:30	**Gala Dinner**		

WEDNESDAY

09:00-09:30	**Invited H** **Edward Yi Chang - InGaAs FinFET for Next Generation CMOS Application**	
09:30-10:00	**Applications of devices and structures (Topic 5 - 2 talks)**	
	M.S. Montesdeoca, S. Mateos, D. Mayor, S.L. Khemchandani and J. Del Pino	SET Analysis and Radiation Hardening Approaches for Different LNA Topologies
	R. Pecheux, R. Kabouche, E. Dogmus, A. Linge, M. Zegaoui and F. Medjdoub	Low RF losses up to 110 GHz in GaN-on-silicon HEMTs
10:00-11:00	**POWERBASE SPECIAL SESSION (4 talks)**	
	F.P. Pribahsnik, M. Nelhiebel, M. Mataln, M. Bernardoni, G. Prechtl, et al.	High temperature failure mode in power GaN devices Florian
	S. Brand, B. Boettge, J. Zijl, S. Kersjes and T. Behrens	Evaluation of the capabilities of scanning acoustic microscopy towards assessing the porosity of Ag-sinter layers for GaN …
	J. Priesol, A. Šatka, A. Chvála, S. Stoffels and S. Decoutere	Identification of critical regions in AlGaN/GaN-on-Si Schottky barrier diode using Electron beam induced current method
	D.Poppitz, S.Brand, A.Graff, T.Detzel, O.Haeberlen, G.Prechtl and F. Altmann	Strain analysis and dicing defects of GaN on Si substrates
11:00-11:30	**Coffee Break**	
11:30-13:45	**POWERBASE SPECIAL SESSION-Topics (9 talks)**	
	J. Marek, A. Šatka, M. Jagelka, A. Chvala, P. Pribytný, et al.	Modern PGaN power devices under UIS conditions
	A Barbato, M. Barbato, M Meneghini, M. Silvestri, T. Detzel, et al.	A Novel System to Measure the Dynamic On-Resistance of On-Wafer 600 V Normally-Off GaN HEMTs in Real Application C.
	M Glavanovics, S. Ofner, R. Sleik, M. Nelhiebel, A. Madan and O. Haeberlen	Application Related Reliability Test Concept for GaN HEMT Power Devices
	X. Li, M.V. Hove, M. Zhao, K. Geens, V.-P. Lempinen, J. Sormunen, et al.	200 V enhancement-mode p-GaN HEMTs fabricated on 200 mm GaN-on-SOI with trench isolation for monolithic integration
	S. Stoffels, K. Geens, M. Zhao, H. Liang, X. Li, M. Van Hove and S. Decoutere	Next generation 200mm substrates for GaN power devices
	L. Lymperakis and J. Neugebauer	Thermodynamics, kinetics, and electronic structure of H2 and F2 passivation of defect states in GaN: An ab-initio study.
	K. Geens, M. Van Hove, X. Li, M. Zhao, A. Šatka, A. Vincze and S. Decoutere	CMOS Process-Compatible 200 mm polycrystalline AlN Substrates for GaN Power Transistors
	M. Borga, M. Meneghini, I.Rossetto, M.Silvestri, O.Haeberlen, T. Detzel, et al.	Buffer-induced vertical leakage and charge trapping in normally-off GaN-on-Si HEMTs
	M. Ruzzarin, A Barbato, M. Meneghini, I. Rossetto, M. Silvestri, et al.	Study of trapping in GaN-based power HEMTs based on High-Voltage Double-Pulsed Backgating Measurement System
13:45-14:00	**Closing Ceremony**	
	LUNCH	