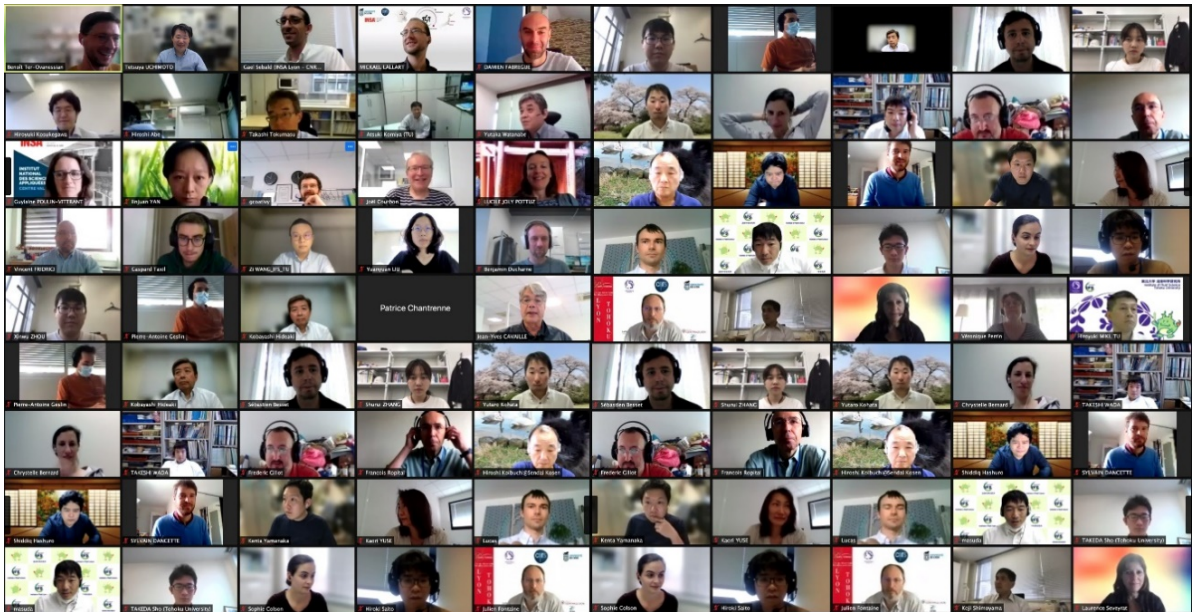


ELyT Workshop 2021

新型コロナウイルス感染拡大の影響により、2021年のELyT Workshopは2021年6月21日～25日の期間、オンラインで開催いたしました。123名の参加者（日本63名、フランス60名）が集い、招待講演3件、口頭発表29件、バーチャルラボツアー/ライブ実験4件、ポスター発表6件、パネルディスカッション1件で構成され、これまでのワークショップと同様に共同研究の成果を発表し、今後の共同研究に向けて非常に有意義な議論を行うことができました。



Lyon Center
Institute of Fluid Science, Tohoku University

LyonSE&N – ELYT workshop 2021

Online but not lifeless

Collaborations and friendships are stronger than any pandemic situation. Following the success of remote collaborations in this unprecedented situation, ELYT/LyonSE&N workshop is maintained this year as a virtual conference. For sure, the objectives of showing common research results and exchanging great ideas and more altogether will resist to the physical, but not human, distances.

Venue

Conference presentations will be held using Zoom.

Link will be sent upon registration.



Show your lab and experiments!

Dedicated slots will be devoted to Lab. tours. If you want to show your premise and outstanding equipment, feel free to contact us.

Also, live demonstration of experiments during talks are encouraged!

Celebrating ELYT Global renewal and Core-to-Core program

2021 is also a special year in the sense that ELYT Global has been renewed as an International Research Network (IRN), while Tohoku IFS was awarded a Core-to-Core (C2C) program on "Construction of an international research exchange center for ammonia combustion and materials toward the realization of a low-carbon society" from the JSPS. A special C2C session will be held during the workshop.

Interact together!

Feel the impression of a real conference thanks to Gather Town®! Interact and discuss in small groups, draw together on white boards and more! Connection link will be provided during the workshop.



Register now!

Conference dates: June 21st-25th, 2021 (15:30-18:00 JST / 8:30-11:00 CEST)

Registration link: <https://forms.gle/KV3Wu3Gb4DBaREka8>

Contact: elytws@grp.tohoku.ac.jp

More information on <https://www.elyt-lab.com/en/content/elyt-workshop-2021>

Start FR	End FR	Day 1 (June 21st)	Day 2 (June 22nd)	Day 3 (June 23rd)	Day 4 (June 24th)	Day 5 (June 25th)	Start JP	End JP			
		Chair: T. Shoji / J.-Y. Cavallé	Chair: M. Ohta / D. Fabregue	Chair: H. Miki / M. Lallart	Chair: T. Uchimoto / G. Sebald	Chair: K. Ogawa / N. Mary					
08:30	08:35	Opening - A.-C. Hladky (CNRS) - M. Kotani (Tohoku) - M. Lallart / J. Fontaine, T. Uchimoto / Y. Sato (ELYT Global) - M.-C. Baietto (INSA Lyon) - K. Maruta (IFS TU) - C. Corre (ECL)	<i>JSPS Core to core program symposium - Construction of an international research exchange center for ammonia combustion and materials toward the realization of a low-carbon society</i>	Introduction of "Core to Core program" K. Maruta and T. Tokumasu	Invited Elie Lefevre, Marion Woytasik, Xavier Leroux, Fabien Parrain <i>Biomechanical energy harvesting for leadless pacemaker application</i>	Invited J. Kittel and F. Ropital <i>Presentation of the corrosion loop CORTEX</i>	15:30	15:35			
08:35	08:40						15:35	15:40			
08:40	08:45						15:40	15:45			
08:45	08:50						15:45	15:50			
08:50	08:55						15:50	15:55			
08:55	09:00						15:55	16:00			
09:00	09:05	M. Ohta, V. Fridrici	Invited H. Kobayashi <i>Role of ammonia combustion and Japan's perspectives</i>	Invited G. Plet, J. Raviol, H. Magoaric, C. Paillet-Mattei <i>Towards the in situ characterization of cerebral aneurysms : first steps of experimental and numerical designs</i>	Invited A. Chiba, K. Yamanaoka, D. Fabregue, S. Aota, J. Adrien, E. Maire <i>Influence of the elaboration method of powder on the quality of EBM built samples</i>	H. Kolbuchi, S. Noro, S. Hongo, S. Nagahiro, H. Ikai, M. Nakayama, T. Uchimoto, J.-P. Rieu <i>Longevin Navier-Stokes simulation of the protoplasmic streaming</i>	16:00	16:05			
09:05	09:10	Tribology for health devices: 15 years of collaboration between Tohoku University (Ohta lab) and ECL (LTDS)					16:05	16:10			
09:10	09:15						16:10	16:15			
09:15	09:20	S. Hirose, J.-P. Rieu, C. Anjard, O. Cochet-Escartin, K. Funamoto					16:15	16:20			
09:20	09:25	Reduced oxygen availability triggers aerotaxis and aerokinesis of Dictyostelium					16:20	16:25			
09:25	09:30		16:25	16:30							
09:30	09:35		Panel discussion Moderator: N. Mary <i>Materials System for Ammonia Combustion</i>	M. Decroocq, E. Maury, G. Lavoué, C. Frindel, M. Ohta <i>Structured hexahedral meshing of a physiological model of vessel n-furcation for computational fluid dynamics</i>	G. Coativy, G. Diguët, K. Yuse, L. Seveyrat, V. Perrin, F. Dalmas, S. Livi, H. Takana, J. Courbon, J.-Y. Cavaille <i>Role of Charge Carrier Transport in the mechanisms of Polyurethane Actuation</i>	S. Colson, M. Kuhn, A. Hayakawa, H. Kobayashi, C. Galizzi, D. Escudie <i>Local stabilization dynamics of ammonia/methane non-premixed flames</i>	16:30	16:35			
09:35	09:40	Y. Kohata, H. Anzai, M. Decroocq, S. Rit, C. Frindel, M. Ohta					Z. Wang, H. Anzai, Y. Kojima, N. K. Putra, J.-P. Rieu, N. Ohtsu, H. Taniho, M. Ohta	H. Abe, B. Ter-Ovanesian, K. Jaffré, N. Mary, Y. Watanabe, B. Normand	S. Morita, A. Yakeno, C. Bagey, S. Obayashi	16:35	16:40
09:40	09:45	Virtual Angiography System as a Platform for Blood Flow estimation					Endothelial cells distribution after the flow exposure experiment	Influence of mechanical surface treatment on passive and oxide behavior of 304L Stainless Steel	Modal approach for extracting flow structure related to the subsonic jet noise generation	16:40	16:45
09:45	09:50									16:45	16:50
09:50	09:55	Coffee break & Gathering					Coffee break & Gathering	Coffee break & Gathering	Coffee break & Gathering	16:50	16:55
09:55	10:00					16:55	17:00				
		Chair: J. Fontaine / H. Kurita	Chair: F. Gillot / A. Kamiya	Chair: L. Joly-Pottuz / Y. Sato	Chair: V. Fridrici / A. Chiba						
10:00	10:05	G. Diguët, G. Sebald, M. Nakano, M. Lallart, J.-Y. Cavallé <i>MagnetoRheological Materials for energy conversion</i>	Y. Kaneko, W. L. Sulen, C. A. Bernard, H. Saito, Y. Ichikawa, K. Ogawa <i>Progressive improvement in deposition efficiency for cold sprayed fluoropolymer coatings</i>	S. Dancette, Y. Amani, J. Luksch, A. Jung and E. Maire <i>In situ characterization and modeling of the deformation and fracture of an aluminum foam</i>	G. Taxil, M. Lallart, G. Sebald, E. Lefevre, B. Ducharme, A. Bartasyle, M. Ouhabaz, H. Kawanoo, T. T. Nguyen <i>Modeling ferroelectric phase transitions for energy harvesting</i>	Gathering time	17:00	17:05			
10:05	10:10						17:05	17:10			
10:10	10:15						17:10	17:15			
10:15	10:20						17:15	17:20			
10:20	10:25						17:20	17:25			
10:25	10:30	C. A. Bernard, H. Takana, O. Lame, K. Ogawa, J.-Y. Cavallé	G. Diguët, H. Miyauchi, S. Takeda, T. Uchimoto, N. Mary, T. Takagi	T. Wada, S.-H. Joo, H. Kato	S. Zhang, S. Takeda, T. Uchimoto, G. Sebald, B. Ducharme	17:25	17:30				
10:30	10:35	Y. Liu, B. Ducharme, K. Makihara, G. Sebald, M. Lallart	EMAR monitoring system of a carbon steel thinning in a corrosive environment	Beating Thermal Coarsening in Nanoporous Materials via High-Entropy Design	Magnetization mechanisms NDT	17:30	17:35				
10:35	10:40	Magnetic characterization of Metglas under tensile stress for energy harvesting applications	M. Lallart, H. Miki, L. Yan, G. Sebald, G. Diguët, M. Ohtsuka, M. Kohl	H. Kurita, T. Kanno, Z. Wang, F. Narita	F. Gillot, P. Mohanasundaram, S. Besset, K. Shimoyama	17:35	17:40				
10:40	10:45		Heat engine based on MultiPhysic Memory Alloys and pyroelectric conversion for thermal energy harvesting	Tensile properties and microstructure of cellulose nanofiber reinforced silkworm silk fibers	Shape optimization with respect to mechanical stability criteria	17:40	17:45				
10:45	10:50					17:45	17:50				
10:50	10:55	G. Sebald, G. Lombardi, L. Maury, J. Jay, A. Kamiya, X. Sze Way, G. Coativy, H. Haissoume, L. Lebrun	Vincent Fridrici Presentation of LTDS	Toshiyuki Takagi Introduction of Tohoku Forum for Creativity Activities	Y. Wang, K. Hayashi, Y. Ootani, S. Bai, T. Shimazaki, Y. Higuchi, N. Ozawa, K. Adachi, M.-I. De Barros Bouchet, J. M. Martin, M. Kubo	17:50	17:55				
10:55	11:00	Elastocaloric cooling using natural rubber: material properties, heat transfer and heat losses effects on proof of concept performances			Role of OH Termination in Mitigating Friction of Diamond-like Carbon under High Load: A Joint Simulation and Experimental Study	17:55	18:00				