



**“Single molecule bio-electronic smart system array for  
clinical testing”**

Grant Agreement n° 824946

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**Deliverable 7.4 - Mid-term report on dissemination  
and communication activities**

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**August 30<sup>th</sup>, 2021**

**with contributions from: Efficient Innovation, CSGI**

## EXECUTIVE SUMMARY

The deliverable D7.4 – “Mid-term report on dissemination and communication activities” reports the second period of activities for the WP7 of the SiMBiT project. This document first presents the internal communication achievements as the monthly meetings between partners. Then, it introduces the dissemination activities conducted during 2020 and the first semester of 2021 through SiMBiT online channels including the addition of a Twitter account. Finally, a list compiles all the events attended by all partners as well as the scientific publications released during this second period. As one can note, the consortium has been quite active during this period despite the global COVID-19 situation, which still severely limited the possible communication and dissemination opportunities.

## CONTENT

### INTERNAL COMMUNICATION

As expected in the Grant Agreement, the consortium should have met every 6 months in persons with all the partners. However, due to the COVID-19 situation, all meetings for this second reporting period were held remotely through video conferencing. Every month WP meetings have been set to address the progress and possible delay of the project in relation with the COVID-19 situation. All meeting minutes can be accessed on the collaborative platform.

Meeting	Date	Localization	Attendees
<b>Steering committee meeting and European commission review</b>	11 <sup>th</sup> – 12 <sup>th</sup> March 2020	Video conferencing	All
<b>WP meeting</b>	23 <sup>rd</sup> April 2020	Video conferencing	All
<b>WP meeting</b>	20 <sup>th</sup> May 2020	Video conferencing	All
<b>WP meeting</b>	18 <sup>th</sup> June 2020	Video conferencing	All
<b>WP meeting</b>	23 <sup>rd</sup> July 2020	Video conferencing	All
<b>WP meeting</b>	20 <sup>th</sup> August 2020	Video conferencing	All
<b>WP meeting</b>	17 <sup>th</sup> September 2020	Video conferencing	All
<b>WP meeting</b>	22 <sup>nd</sup> October 2020	Video conferencing	All
<b>WP meeting</b>	20 <sup>th</sup> November 2020	Video conferencing	All
<b>WP meeting</b>	17 <sup>th</sup> December 2020	Video conferencing	All
<b>WP meeting</b>	20 <sup>th</sup> January 2021	Video conferencing	All
<b>WP meeting</b>	18 <sup>th</sup> February 2021	Video conferencing	All
<b>WP meeting</b>	18 <sup>th</sup> March 2021	Video conferencing	All
<b>WP meeting</b>	21 <sup>st</sup> April 2021	Video conferencing	All
<b>WP meeting</b>	20 <sup>th</sup> May 2021	Video conferencing	All
<b>WP meeting</b>	17 <sup>th</sup> June 2021	Video conferencing	All

### DISSEMINATION AND OUTREACH ACTIVITIES

#### ONLINE COMMUNICATION SUPPORTS

Early on in the project a SiMBiT public website ([simbit-h2020.eu](http://simbit-h2020.eu)) and social media profile on LinkedIn (<https://www.linkedin.com/company/36020918>) have been developed. In addition, following the advice of the European Commission's reviewers, a twitter account (<https://twitter.com/simbitproject> - 35 tweets in 1 year) was created in 2020 to increase and diversify online communication channels.

These different social network profiles were to be used as the main communication channels for disseminating information on the progress of the project and the events attended by the partners.

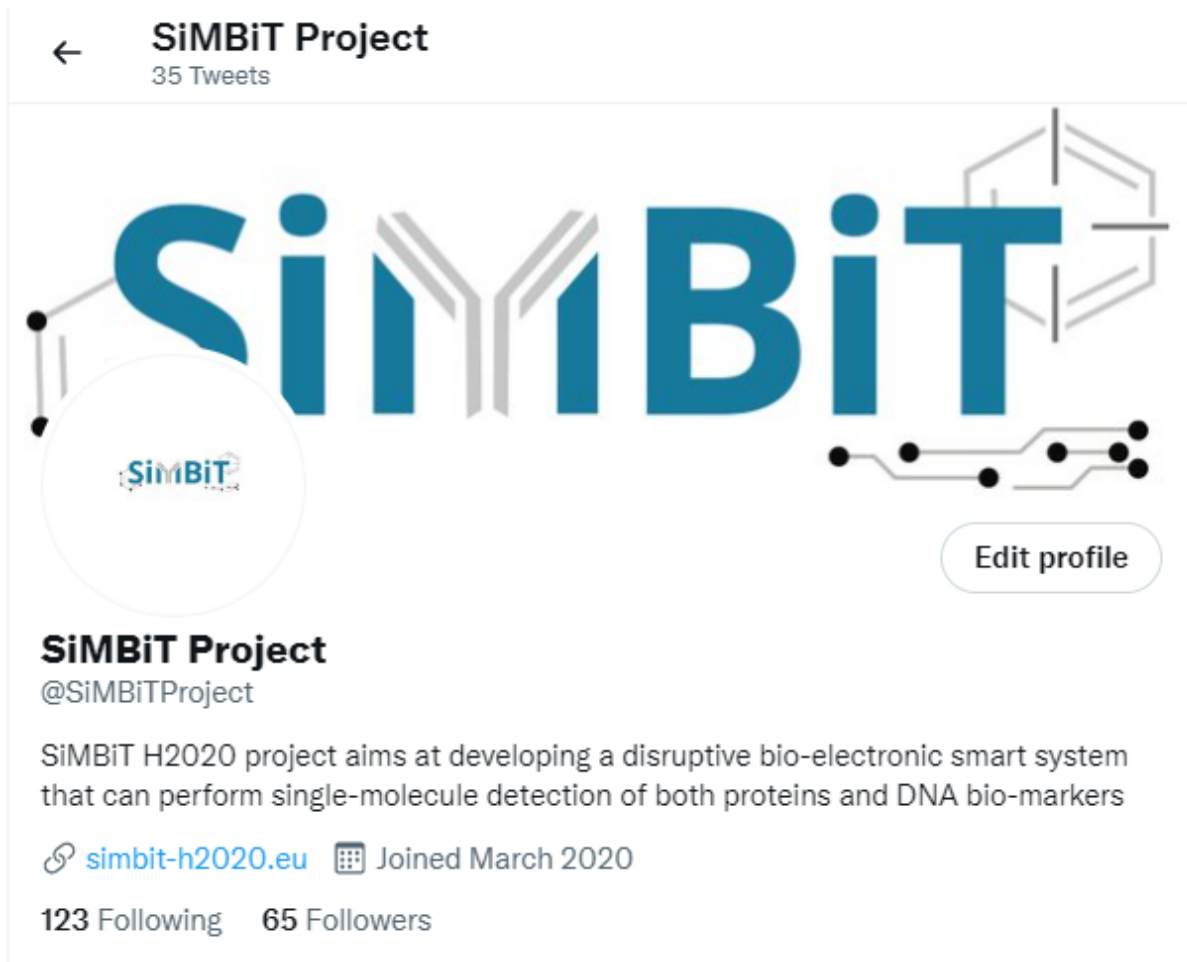


Figure 1 : SiMBiT twitter account

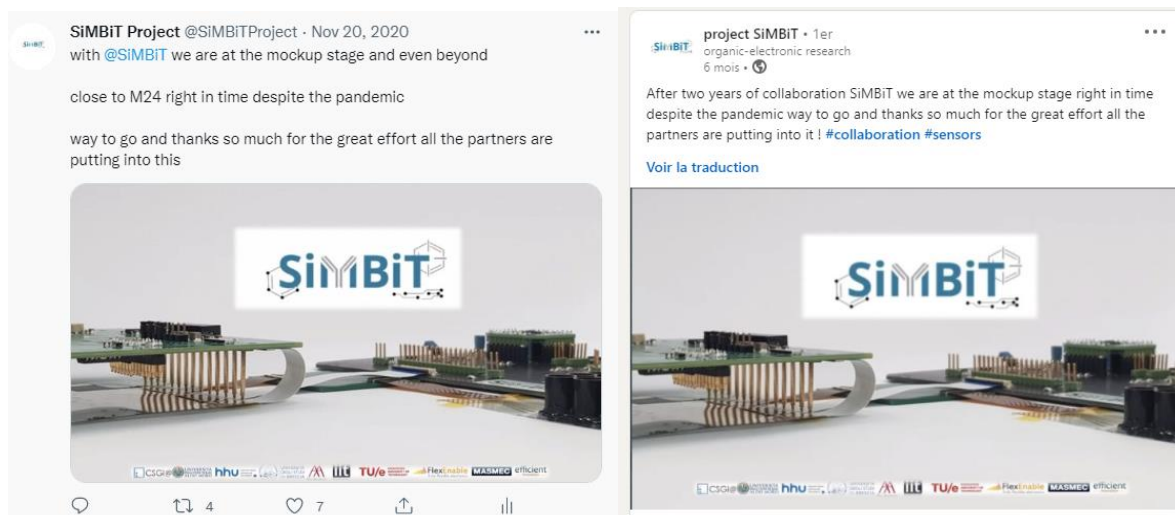


Figure 2 : example of a post from Twitter and relayed to LinkedIn

## EVENTS

To ensure an effective communication on the SiMBiT project activities and outcomes, members of the project attended relevant events like congresses, conferences, workshops, professional trades etc. During the second reporting period (M13-M30), SIMBIT partners attended 11 events and estimated to have then directly reached around 400 people mostly from the scientific community. The number of events attended was greatly reduced compared to the first year of the project due to the COVID-19 situation. For sanitary and economical related issues, most of the events were held virtually. The following table lists the attended events in person by the Partners:

Event	Topic	type of events	estimated nb persons event	estimated nb of persons reached	type of persons reached	Date	Entity	Partners attending
<b>“Functional Materials at Biological Interfaces” in Israel, Technion</b>	Chemical Sensors for Wearable Devices	Participation to a Conference	nd	nd	Scientific Community	5th - 6th february 2020	Abo	Ronald Osterbacka
<b>DPC (German pancreatic club) 2020</b>	Interdisciplinary Pathology	Participation to a Conference	500	50	Scientific Community	13th-15th february 2020	UDUS	Caroline Driescher
<b>MRS-spring meeting and exhibit in Phoenix - arizona</b>	material research society	Participation to a Conference	Virtual	100	Scientific Community	13th - 17th april 2020	CSGI	Luisa Torsi
<b>Yearly conference of the German society of Pathology (DGP) 2020</b>	Our Immune system	Participation to a Conference	500	50	Scientific Community	4th - 7th june 2020	UDUS	Caroline Driescher

<b>ISFOE 2020 6-9 July, Thessaloniki (GR)</b>	Selective Single-Molecule Detection of clinically relevant biomarkers with an Organic Transistor	Participation to a Conference	500	100	Scientific Community	6th-9th July 2020	ABO	Eleonora Macchia
<b>"Technologies for the future", workshop in Bolzano, IT</b>	Inauguration of the NOI Techpark	Participation to a Workshop	100	10	Industry	28th September 2020	IIT	Mario Caironi
<b>Virtual MRS-fall meeting and exhibit</b>	material research society	Participation to a Conference	virtual event	150	Scientific Community	27th November - 4th December 2020	IIT	Fabrizio Antonio Viola
<b>InnoLAE</b> <a href="https://innolae.org/programme">https://innolae.org/programme</a>	High-performance materials and processes optimised for flexible displays and other OTFT applications	Participation to a Conference	100	40	Scientific Community	25th February 2021	FlexEN / IIT	May Wheeler / Mario Caironi
<b>I3S 2021</b> <a href="https://i3s2021dresden.sciforum.net/">https://i3s2021dresden.sciforum.net/</a>	Printed Electronics for Large-Area Sensors	Participation to a Conference	100	10	Scientific Community	21 May 2021	IIT	Mario Caironi

<b>ECS meeting - international meeting on chemical sensors (IMCS)</b>	Solid-state and electrochemical science & technology	Participation to a Conference	1000	100	Scientific Community (Higher Education, Research)	30th May - 3rd June 2021	TU/e	Eugenio Cantatore
<b>IEEE IFETC 2021</b> <a href="https://ifetc.org/web/index.php">https://ifetc.org/web/index.php</a>	Pushing the Limits of Printed and Flexible Organic Electronics: Thin, Fast and Edible	Participation to a Conference	100	20	Scientific Community	10 August 2021	IIT	Mario Caironi

#### SCIENTIFIC PUBLICATIONS – PUBLICATIONS AND ARTICLES

During the second period, the consortium published more than 15 articles in renowned and peer-reviewed scientific journals in order to present the results of the research carried out during the project's activities. These articles are mainly relevant to the scientific community, but also to all the innovative stakeholders in the field of organic electronics, pancreatic cancer diagnosis and ultra-sensitive diagnostic tools.

Type of scientific publication	Title of the scientific publication	DOI	Authors	Title of the journal	Year	Place of publication	publisher	peer-reviewed	Public & private participation	Is/ will open access
Article in journal	Ultra-low HIV-1 p24 detection limits with a bioelectronic sensor	10.1007/s00216-019-02319-7	Eleonora Macchia, Lucia Sarcina, Rosaria Anna Picca, Kyriaki Manoli, Cinzia Di Franco, Gaetano Scamarco, Luisa Torsi	Analytical and Bioanalytical Chemistry	2020	germany	Springer Verlag	Y	N	yes-green
Article in journal	Enhancing the Sensitivity of Biotinylated Surfaces by Tailoring the Design of the Mixed	10.1021/acsomega.0c01717	Davide Blasi, Lucia Sarcina, Angelo Tricase, Angela Stefanachi, Francesco Leonetti, Domenico Alberga, Giuseppe Felice	ACS Omega	2020	USA	American Chemical Society	Y	N	yes-gold

	Self-Assembled Monolayer Synthesis		Mangiatordi, Kyriaki Manoli, Gaetano Scamarcio, Rosaria Anna Picca, Luisa Torsi							
Article in journal	Printed, cost-effective and stable poly(3-hexylthiophene) electrolyte-gated field-effect transistors	10.1039/D0TC03342A	Davide Blasi, Fabrizio Viola, Francesco Modena, Axel Luukkonen, Eleonora Macchia, Rosaria Anna Picca, Zahra Gounanid, Amit Tewarid, Ronald Österbackad, Mario Caironi, Zsolt M. Kovacs Vajnaf, Gaetano Scamarcio, Fabrizio Torricelli, Luisa Torsi	Journal of Materials Chemistry C	2020	UK	Royal Society of Chemistry	Y	N	yes-gold
Article in journal	Standalone operation of an EGO-FET for ultra-sensitive detection of HIV	10.1016/j.bios.2020.112103	S. K. Sailapu, E. Macchia, I. Merino-Jimenez, J. P. Esquivel, L. Sarcina, G. Scamarcio, S. D. Minter, L. Torsi N. Sabate'	Biosensors and Bioelectronics	2020	The Netherlands	Elsevier	Y	N	yes-gold
Article in journal	New trends in single-molecule bioanalytical detection	10.1007/s00216-020-02540-9	E. Macchia, K. Manoli, C. Di Franco, G. Scamarcio and L. Torsi	Analytical and Bioanalytical Chemistry	2020	germany	Springer Verlag	Y	N	yes-gold
Article in journal	Organic Field-Effect Transistor Platform for Label-Free, Single-Molecule Detection of Genomic Biomarkers	10.1021/acsensors.0c00694	E. Macchia, K. Manoli, C. Di Franco, R. A. Picca, R. Österbacka, G. Palazzo, F. Torricelli, G. Scamarcio and L. Torsi	ACS Sensors	2020	USA	American Chemical Society	Y	N	yes-gold
Article in journal	Assessment of Gold Bio-Functionalization for Wide-Interface Biosensing Platforms	10.3390/s20133678	L. Sarcina, L. Torsi, R.A. Picca, K. Manoli, E. Macchia	Sensors	2020	Switzerland	MDPI	Y	N	yes-gold

Article in journal	Multiscale real time and high sensitivity ion detection with complementary organic electrochemical transistors amplifier	10.1038/s41467-020-17547-0	P. Romele, P. Gkoupidenis, D. A. Koutsouras, K. Lieberth, Zs. M. Kovács-Vajna, P.W.M. Blom, F. Torricelli	Nature Communications	2020	nd	Nature Research	Y	N	yes-gold
Article in journal	Organic-based inverters: basic concepts, materials, novel architectures and applications	10.1039/d0cs00106f	T. Leydecker, Z. M. Wang, F. Torricelli, E. Orgiu	Chem Soc Rev	2020	nd	Royal Society of Chemistry	Y	N	
Article in journal	"Pre-Operative Diagnostics of Pancreatic Cystic Lesions: Role of Molecular Analyses"	10.1038/s41598-021-81065-2	L. Haeberle, M. Schramm, W. Goering, L. Frohn, C. Driescher, W. Hartwig, HK Preissinger-Heinzel, T. Beyna, H. Neuhaus, K. Fuchs, V. Keitel-Anselmino, W. T. Knoefel, I. Esposito	Scientific Reports	2021	UK	Nature Research	Y	N	yes-gold
Article in journal	"A Rapidly Stabilizing Water-Gated Field-Effect Transistor Based on Printed Single-Walled Carbon Nanotubes"	doi.org/10.1021/acsaelm.1c00332	A. Molazemhosseini, F. A. Viola, F. J. Berger, N. F. Zorn, J. Zaumseil, M. Caironi	ACS Applied Electronic Materials	2021	USA	American Chemical Society	Y	N	yes-gold



Article in journal	Single-Molecule Bioelectronic Label-Free Assay of both Protein and Genomic Markers of Pancreatic Mucinous Cysts' in Whole Blood Serum	10.1002/aelm.20210304	Eleonora Macchia, Lucia Sarcina, Caroline Driescher, Zahra Gounani, Amit Tewari, Ronald Osterbacka, Gerardo Palazzo, Angelo Tricase, Zolt Miklos Kovacs Vajna, Fabrizio Viola, Francesco Modena, Mario Caironi, Fabrizio Torricelli, Irene Esposito, Luisa Torsi	Advanced Electronic Materials	2021	germany	-	Y	N	yes-gold
Publication in conference proceeding/workshop	Enhanced multifunctional bioelectronics with integrated organic electrochemical transistor architectures	10.1117/1.2.2583425	Fabrizio Torricelli	Progress in Biomedical Optics and Imaging - Proceedings of SPIE	2021	USA	SPIE	Y	N	yes-green
Chapters in books	Electronic and ionic transport in organic materials and devices	10.1016/B978-0-12-818890-3.00003-5	P. Romele, Zs. M. Kovacs Vajna, F. Torricelli	Organic Flexible Electronics	2021	United Kingdom	Elsevier	Y	N	nd
Article in journal	Bile-Based Cell-Free DNA Analysis Is a Reliable Diagnostic Tool in Pancreatobiliary Cancer	10.3390/cancers13010039	C.Driescher, K. Fuchs, L. Haeberle, W. Goering, L. Frohn, F.V. Opitz, D. Haeussinger, W.T. Knoefel, V. Keitel, I. Esposito	Cancers (Basel)	2021	Switzerland	MDPI	Y	N	yes-gold
Publication in conference proceeding/workshop	New Frontiers in Smart Sensors Based on Printed Organic Electronics architectures	<a href="https://doi.org/10.1149/MA2021-01351117mtgabs">https://doi.org/10.1149/MA2021-01351117mtgabs</a>	Marco Fattori and Eugenio Cantatore	ECS Meeting Abstracts, Volume MA2021-01	2021	USA	IOP Science	Y	N	yes-green

## CONCLUSION

The initial communication tools implemented during the first year of the project to ease its internal communication and overall management r have been used and updated throughout the second period of the SIMBIT project, enabling strong interaction between the partners despite the COVID-19 situation.

In addition to these already existing channels, a twitter account was created and feed with updates on the project achievements. Those social networks as a whole made it possible to achieve regular communication outside of the Consortium. Even if dissemination activities were somehow slowed down during this second period due to the COVID-19, the SIMBIT consortium took advantage of it to increase its scientific publications (15) and still managed to attend 11 events (congress, workshop).