Theramin conference Version 1

## THERAMIN2020 conference 4-5<sup>th</sup> February 2020, Manchester

The EC project Theramin (thermal treatment for radioactive waste minimisation and hazard reduction) will host a conference to share the results of the project and other recent developments with scientists and engineers working on thermal treatment and others interested in the latest developments in this field. Abstracts are invited for presentations (oral or poster) relating to the following themes:

- Strategic impact of thermal treatment
- · Demonstration of thermal treatment technologies
- Disposability of thermal products and characterisation techniques

There will be a networking reception and conference dinner on 4<sup>th</sup> February. There will also be an optional visit to the Immobilisation Science Laboratory at the University of Sheffield on 6<sup>th</sup> February (limited spaces, please notify interest during registration).

## Summary of key details:

• Title: Theramin2020 – thermal treatment of radioactive waste

• Date: Tuesday 4 to Wednesday 5 February 2020

• Venue: Mechanics Institute, Manchester

Dinner at the Manchester Conference Centre (and accommodation in

the attached Pendulum Hotel)

 Option to visit University of Sheffield laboratories and meet researchers on Thursday 6<sup>th</sup> February (half-day tour).

Please register using the following link by 20<sup>th</sup> December 2019: <a href="https://onlineshop.shef.ac.uk/conferences-and-events/faculty-of-engineering/materials-science-engineering/theramin-conference">https://onlineshop.shef.ac.uk/conferences-and-events/faculty-of-engineering/materials-science-engineering/theramin-conference</a>

## Registration costs:

- For Theramin partners, costs are covered by the EC project budget.
- For End Users and other participants registration will cost £150.
- A limited number of free places are available for participants who are full-time students (please visit the Theramin website for an application form: http://www.theramin-h2020.eu/conference.htm).

We look forward to seeing you in Manchester.

Professor Neil Hyatt, University of Sheffield Dr Jenny Kent, GSL

Conference co-chairs

GSL 1 December 2019

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Timing/theme	Topic	Who
	Day One	
0900 – 1030	Registration (with refreshments)	UoS students + GSL staff
	Chair opens meeting	
1030 – 1050	Welcome, overview of project – objectives, main work packages, outcomes	Matti Nieminen, Project Co-ordinator
1050 – 1100	Welcome from EC, perspective on how this project fits into overall picture	Christophe Davies, EC representative
	WP2 Lead to chair session	·
1100 – 1130	IAEA's perspective on the role of thermal technologies in processing radioactive waste	Willie Meyer, IAEA
1130 – 1200	The potential for thermal treatment of UK higher activity wastes	Mark Dowson, Sellafield Ltd.
1200 – 1230	From Technology to Acceptance Criteria: Defining Thermal Treatment's Place in the Waste Management Technology Mix	Mike Moulin-Ramsden, Veolia Nuclear Solutions
1230 - 1315	Lunch	
	WP2 Lead to chair session	
1315 – 1335	Strategic Study on Thermal Treatment of European Radioactive Wastes	Slimane Doudou, Galson Sciences Ltd.
1335 – 1410	Assessing the value of thermal treatment technologies	Adam Fuller, Galson Sciences Ltd.
	WP3 Lead to chair session	
1410 – 1415	WP3 Lead introduction	Sean Clarke, NNL
1415 – 1445	Thermal Treatment of Idaho National Laboratory Problematic Reactive Wastes Using GeoMelt® In-Container Vitrification	Michael Connolly, INL
1445 – 1515	Active demonstration of the thermal treatment of surrogate sludge and surrogate sea dump drums using the Geomelt ICV melter installed in NNL Central Lab	Charlie Scales, NNL
1515 - 1530	Tea break	
1530 – 1600	DEM&MELT In-Can Melting Technology for the Vitrification of D&D and Remediation Waste	Régis Didierlaurent, Orano
1600 – 1630	Vitrification of inactive incineration ashes in a full scale In Can Melter	Nicolas Massoni, CEA
16.30 - 1700	Applications of Joule-heated ceramic melter (JHCM) technology – title to be confirmed	Atkins/VSL
1700 – 1705	WP3 Lead wraps up session	Sean Clarke, NNL
1705 - 1710	Conference chair provides reminders for poster session, conference dinner and start time in the morning	Chair
1710 - 1830	Poster session and refreshments	Poster presenters
1930	Conference dinner at the MCC	

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Day Two			
0730 – 0900	Registration (with refreshments from 0800)		
0830 - 0840	Welcome by conference chair	Chair	
	French Innovative Thermal Treatment Processes		
0840 – 0910	for The Management Radioactive Organic Liquid	Hélène Nonnet, CEA	
	Waste		
0910 – 0940	Hot Isostatic Pressing: Trials of active and	Laura Gardner,	
	inactive simulant UK ILW wastes	University of Sheffield	
0940 – 1000	Pilot Scale demonstration of the use of hot	•	
	isostatic pressing (HIP) for the immobilisation of	Charlie Scales, NNL	
	sludge wastes		
1000 – 1030	Gasification based thermal treatment of LILW	Matti Nieminen, VTT	
1030 – 1100	Belgoprocess experience of plasma melting and	Ion Dookoro	
	its industrial application at Kozloduy – title to be	Jan Deckers, Belgoprocess	
	confirmed	Beigopiocess	
1100 – 1130	Tea break		
	WP4 Lead to chair session		
1130 – 1135	WP4 Lead introduction	Benjamin Frasca, Andra	
1135 – 1205	Development of Generic Criteria for Evaluating	Liz Harvey, Galson	
1130 - 1205	the Disposability of Thermally Treated Wastes	Sciences Ltd.	
1205 – 1235	Characterisation of current and historic vitreous	Samuel Walling,	
	simulant wasteforms at the University of Sheffield	University of Sheffield	
1235 – 1315	Lunch		
	Characterization and stability of selected ash	Natalia Daniels,	
1315 – 1345	fractions from thermal treatment of radioactive	Forschungszentrum	
	wastes at the JÜV incineration facility	Jülich	
1345 – 1405	Geopolymerisation of gasified ion-exchange	Tapio Vehmas, VTT	
	resins	,	
4405 4405	Synthesis and characterisation of high ceramic	Malin Dixon Wilkins,	
1405 – 1425	fraction brannerite (UTi2O6) glass-ceramic	University of Sheffield	
	composites	Lise Griffault, Andra	
1425 – 1455	Influence of thermal treatment on the disposability of ion exchange resins in deep geological		
	repository: a French case		
1455 – 1525	Plasma incineration of cemented concentrates	Katrien Meert, NIRAS/ONDRAF	
	and resins: preliminary evaluation of the		
	disposability of the end product		
1530 - 1600	"Panel session - Q&A		
	How has the THERAMIN project moved the state	Jenny Kent, GSL and	
	of the art for thermal treatment on? What should	panel of THERAMIN	
	the next steps be? "	project participants	
1600 - 1610	Chair to close of conference	Chair	
Day Three			
Visit to University of Sheffield Immobilisation Science Laboratories			
0830	Meet at Manchester Piccadilly		
	Train to Sheffield (50 mins)		
1000 – 1400 (including lunch?)	Visit to UoS laboratories		
1430	Train to Manchester (for those who need it)		
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