



- A. IFRF Ltd matters
- B. Strategy and Governance
- C. Membership
- D. Research and Training
- E. Events and Communications
- F. Resources

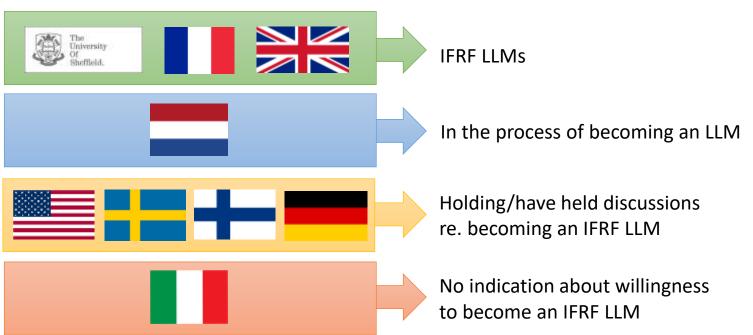




## A. IFRF Ltd matters (1/2): Overview

#	Goal	Year	Who	SitRep
A1	Increase Limited Liability Members from 3 to 5 in total (by end-2021)	2021	PS	3 LLMs
A2	Co-locate and embed IFRF within 'PACT-2' initiative (by end-2021)	2021	PS (GenS)	PACT-2 funding secured (part of TERC)
#	KPI	TGT at 2019		SitRep
1	Limited Liability Members (total)	4		3

### **Limited Liability Members (LLMs):**



NC	LLM status (more detail)
NVV	Processing LLM paperwork
AFRC	Discussions to be held at next member meeting in Hawaii (10 <sup>th</sup> September)
SFRC	Voted to pause becoming an LLM until more NCs sign up
FFRC	Resolution not reached at meeting; VB holding discussions to secure agreement
DVV	To be discussed at next member meeting in Munich (14 <sup>th</sup> November)
CI	No indication on position



## ✓ A. IFRF Ltd matters (2/2): Overview cont.

### **PACT-2:**



PACT-2 funding secured as part of new £21m 'Translational Energy Research Centre' (TERC) to be built in Sheffield, and announcement made in the press

### **Archive:**



Stored archive paperwork (IJmuiden era) being relocated from PACT to IFRF office in Sheffield

### **Policies:**



IFRF Policies reaching review date have been reviewed and updated

### **SUEL:**



Meeting held with SUEL regarding Company Secretary activity and finance administration, 16<sup>th</sup> April



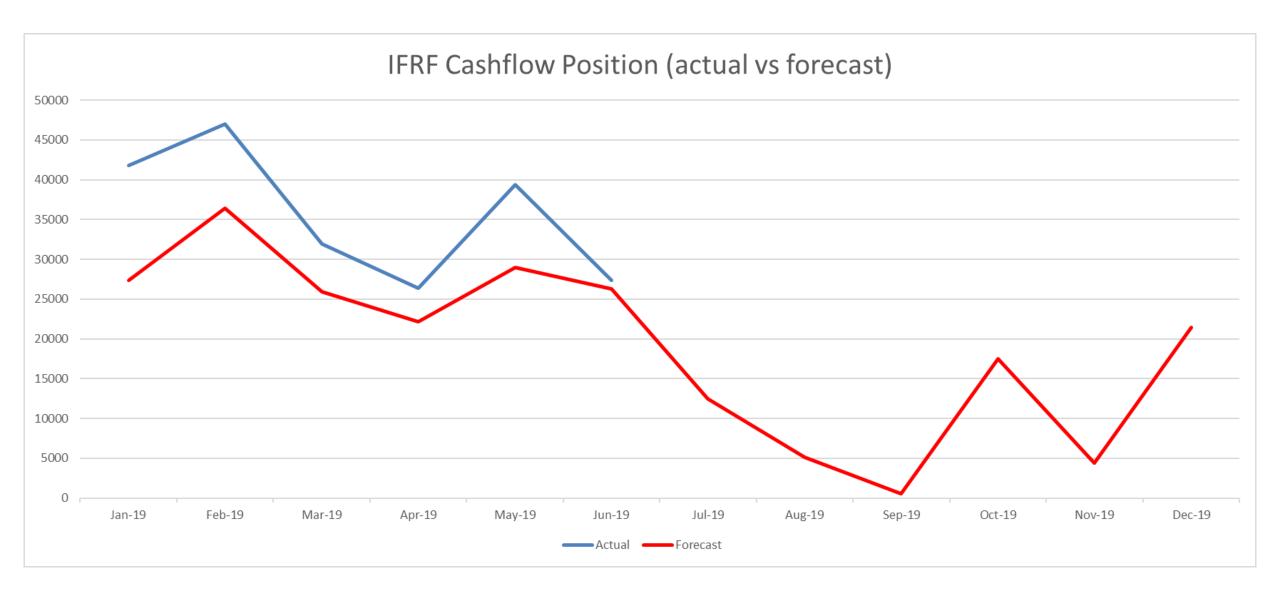
# B. Strategy and Governance (1/3): Overview

#	Goal	Year	Who	SitRep
B1	Update mission, values and vision statements (early-2019)	2019	PS	Completed – uploaded to the IFRF website
B2	Address 'SoR role' on Council (2019)	2019	PS	Council agreed to create a VP-Research role; NCs encouraged to identify suitable candidates
В3	Revise 'Co-opted Specialist' responsibilities on Council and recruit appropriately (2019)	2019	PS	Karen Finney formally invited; NCs encouraged to identify suitable candidates for remaining Specialists
B4	Confirm 'additional Council member' to serve on ExCo (early-2019)	2019	PS	Completed - CB confirmed
B5	Build a 3-month operational reserve (by end-2021); spend surpluses on research activity	2021	PS (LS)	Budget and Financial plans approved by Council
В6	Try to establish a more consistent NC membership fees structure (2019)	2019	PS (LS)	Paper and discussion held at CL(2019)01; more detailed paper to be submitted to CL(2019)02

#	KPI	TGT at 2019	SitRep
2	Operational reserve (by end-2021)	-	Budget and Financial plans agreed by Council



## B. Strategy and Governance (2/3): Cashflow





## B. Strategy and Governance (3/3): IFRF Council



Virtual Council meeting held Friday 18<sup>th</sup> April 2019 Nine attendees (53%)



Strategic Review (SR) & Three Year Plan (TYP) Finalised following Council Meeting and circulated to NCs to share with their members; updated to IFRF website

### **Vice President:**

- Research and International Vice President roles agreed by Council
- Sébastien Caillat (pictured) named as Vice President – International
- NCs encouraged to identify suitable candidates for the Vice
   President Research vacancy from their members



Karen Finney (pictured right)
 formally invited to Council as a
 Co-opted Specialist – Early Career
 Research





- Mikko Hupa (pictured far right) confirmed as Co-opted Specialist – Academia
- NCs encouraged to identify suitable candidates for the remaining CS vacancies ('Environment' and 'Sector – Waste Treatment') from their members



# C. Membership (1/4): Overview

#	Goal	Year	Who	SitRep
C1	Establish China NC (2019)	2019	PS	4 Chinese organisational members recruited
C2	Re-establish Japan NC, if possible (by end-2021)	2021	PS	No progress
C3	Develop AMG esprit de corps and use as vehicle for growth in other Asian countries	2019	LS (PS)	AMG Community Plan drafted – to be agreed by Council
C4	Maintain/grow existing NCs (inc. Italy)	2019	PS	PS attended BFRC meeting
C5	Investigate opportunity for core group in Poland and Belgium to form NC (2019)	2019	PS	Discussions held at EC(2019)01 – no further progress
C6	Consider MEA and C&SAM for growth; reactive to opportunities in other regions	2019	PS	No progress

#	KPI	TGT at 2019	SitRep
3	National Committees (total)	9	8
4	Organisational members (total)	130	123 orgs; 9 individuals

- Events and Communications regarding NCs covered in section E
- PS attended BFRC meeting in Poole, UK; June 2019



## C. Membership (2/4): NC Breakdown

#### **AFRC**

- 2019 fees paid December 2018
- 21 organisations; 5 individuals

#### **BFRC**

- Fees outstanding from June (being addressed)
- 8 organisations

### **CF**

- 2019 fees due October 2019
- 19 organisations

### CI

- 2018 fees paid March 2019
- 2019 fees due December 2019
- 10 organisations

#### **DVV**

- 2019 fees paid February 2019
- 23 organisations

#### **FFRC**

- 2019 fees paid May 2019
- 13 organisations

#### **NVV**

- 2019 fees paid December 2018
- 4 organisations

#### **SFRC**

- Fees outstanding from February (of concern)
- 9 organisations

#### AMG

- Invoices issued January 2019
- 90% of AMG members paid
- 16 organisations; 4 individuals
- CFRC 4 Chinese organisations;
   reviewing legislation to set up NC

9



## C. Membership (3/4): Member Breakdown

## 123 member organisations

- 2 up from Q1 2019
- Down 4 from Q2 2018

### Includes:

- Large industry = 47 (no change)
- Small industry = 28 (no change)
- Academia = 48 (+2 from Q1 2019)

### 9 individual members

- Same as Q1 2019
- Down 2 from Q2 2018





## C. Membership (4/4): Member Enquiries

### Type of enquiries:

- Archive papers
- Website logons
- Document requests
- MNM subscribers
- MNM article

### **5 Library requests\*:**

- \*Down 3 from Q1 2019
- Chalmers University (5)





# D. Research and Training: Overview (1/3)

#	Goal	Year	Who	SitRep
D1	Expand network of Preferred Research Partners and establish MoUs (inc. in China)	2019	PS	GWI agree to become PRP
D2	Establish 'mini-projects' initially with UK universities (2019)	2019	PS	3 EngD projects established. JD's API concept still to be progressed
D3	Seek opportunities for collaborative R&D projects and react to partnership requests	2019	PS	Promoted H2020 2019 Calls in MNM
D4	Co-develop and deliver two pilot training courses (with partners) in 2019-2020	2019	PS (LS)	Ideas discussed at CL(2019)01; approached UoS regarding ECR Training
D5	Develop and deliver one web-based training course in 2019	2019	PS (LS)	Ideas discussed at CL(2019)01
D6	Establish support mechanism with UK Centre for Doctoral Training	2019	PS	<b>Completed</b> - industrial partner of CDT from 1/4/19.
D7	Maintain referral and commission arrangement with Green Flames Technology re. probes	2019	LS	One probes order received; one probes quote issued

#	KPI	TGT at 2019	SitRep
5	Preferred Research Partners (total)	3	2
6	Collaborative research projects involving members (total)	1	0
7	Training courses delivered within year (real/virtual)	1	0



## D. Research and Training: Training Proposals (2/3)



- Safety of combustion
- Operating pilot-scale rigs



Combustion masterclass



Ideas discussed at CL(2019)01



## D. Research and Training: Probes and MoU (3/3)



### **Probes**

- 1 x Probes order received from RI:SE (SFRC member)
- 1 x Probes quote issued to ArcelorMittal (CF member)



PRP MoU signed with GWI Essen



# E. Events and Communications: Overview (1/3)

#	Goal	Year	Who	SitRep
E1	Develop and deliver 'IFRF 2021' conference (2021) – location to be decided	2021	LS (PS)	No progress; location TBD by end 2019
E2	Co-develop and deliver (with NCs) one TOTeM per year (2019-2021)	2019	LS (PS)	Potential TOTeM (with CI) for 11/2019 being discussed; TOTeM (with CF) confirmed for 02/2020
E3	Support all NCs to deliver Flame Days/Symposia type events annually (inc. China NC)	2019	LS (PS)	Support provided to FFRC for NFD2019, AFRC for AFRC2019 and NVV for COMBURA 2019
E4	Develop and deliver one specialised 'Roundtable Workshop' (by end-2021)	2021	LS (PS)	No progress
E5	Establish two Specialised Networking Gps. (2019-2020); each to hold two webinars/yr.	2019	PS (LS)	Ideas discussed at CL(2019)01; waste sector to be progressed via TOTeM in Q4
E6	Continue to develop IFRF website as the hub for digital delivery of IFRF's services	2019	LS (ESP)	Website amendments and improvements ongoing; CRM installation now complete
E7	Co-develop and deliver any 'daughter' website/pages requested by any NC	2019	LS (ESP)	Guide on how to update NC pages issued to NC chairs; NFD19 event page regularly updated; NFD19 web statistics sent to FFRC



# E. Events and Communications: Overview (2/3)

#	Goal	Year	Who	SitRep
E8	Find emailing solution for comms with Chinese members and NC (2019)	2019	LS	Completed – ifrf@outlook.com used to communicate with CFRC members
E9	Maintain bi-monthly 'MNM' e-newsletters (i.e. 26/yr.); maintain freshness and balance	2019	LS (PS)	7 MNMs in Q2; MNM refresh plans agreed by Council; Council agreed to open MNM to non-members
E10	Further develop social media activity: Twitter,LinkedIn, WeChat, and YouTube	2019	LS (PS)	Social media activity update
E11	Review 'Industrial Combustion' online journal; revise Editorial Board and processes (2019)	2019	PS (LS+GenS)	IC Journal process reviewed and plan created
E12	Overhaul and update the online 'Combustion Handbook' (2019-2020)	2019	LS (PS)	No progress
E13	Maintain publication of 'IFRF Annual Reports'	2019	LS (PS+Pres)	AR2018 published; previous Annual Reports uploaded to the website
E14	Close-out '#IFRFAt70' PR campaign; launch roll-out of IFRF 3-Year Plan	2019	LS (PS)	<b>Completed</b> - #IFRFAt70 publication issued and closed; TYP shared via MNM
E15	Cooperate/co-market with at least three combustion R&D related orgs.	2021	LS	Agreement reached with UK organisations to cooperate; Joint event under development for 10/2019; information sharing amongst UK organisations
E16	Produce updated standard IFRF brochures (e-publish); restock promotional gifts (2019)	2019	LS (PS)	IFRF brochures reviewed and initial designs produced"; gifts restocked and range expanded 16



# E. Events and Communications: Overview (3/3)

#	KPI	TGT at 2019	SitRep
8	IFRF Conference delivered	0	0
9	TOTeMs delivered	1	0
10	National Flame Days/Symposia supported	2	2
11	Specialised Networking Groups (SNGs) established and holding webinar meetings (total)	1	0
12	MNMs published	26	13
13	Industrial Combustion journal papers published	6	0 (12 being processed)



## E. Events and Communications: Events (1/3)

### Potential future TOTeM topics for 2019/2020:

- TOTeM46? being developed with CI (Italy) for October 2019?:
   'Energy-from-Waste' (thermal processes, advanced thermal processes & biological processes relevant to IFRF)
  - Topic generated from MNM series on EfW
- TOTeM47 being developed with CF (France) for February 2020:
   '3D printing for burners'

### Other topics under discussion:

- AFRC and APIs work on standards for process heaters and flares
  - Topic generated from AFRC Symposium 2017
  - People keen on TOTeM outside of Europe
- Hydrogen and ammonia as energy vectors impact on combustion
  - Topic generated from TOTeM45







## E. Events and Communications: Events (2/3)

### **NC** breakdown

### **AFRC**

Promotion of AFRC2019 (9<sup>th</sup> – 11<sup>th</sup> September 2019) via MNM and social media

### **BFRC**

General meeting held 19<sup>th</sup> June; Poole, UK - PS attended and presented

#### **CF**

General meeting held 14<sup>th</sup> June; Piacenza, Italy; Discussions held regarding TOTeM in Q1 2020

### CI

Discussions regarding TOTeM

#### **DVV**

Annual Meeting 14<sup>th</sup> November – invited PS to speak

#### **FFRC**

NFD2019 (28<sup>th</sup> – 29<sup>th</sup> August) web page updated and page analytics sent to FFRC; NFD2019 promoted via MNM – PS to attend

#### NVV

Save the date for COMBURA 2019 (10<sup>th</sup> October) issued

#### **SFRC**

NFD2019 web page updated and page analytics sent to FFRC; NFD2019 promoted via MNM

#### **AMG**

Chinese Flame Research Committee reviewing legislation regarding setting up the NC; PS to visit in 2019



## E. Events and Communications: Events (3/3)

### Other meetings attended by IFRF

- Update meeting with Roger Dudill, BFRC; Sheffield, UK (PS + LS)
- Update meeting with Mohamed Pourkashanian; Sheffield, UK (PS + LS)
- Visit to PACT; Sheffield, UK (LS)
- Finance update meeting with SUEL; Sheffield, UK (LS)
- Attended inaugural Industry Advisory Board (IFRF a member) of the UK Centre for Doctoral Training on Resilient Decarbonised Fuel Energy Systems (PS)





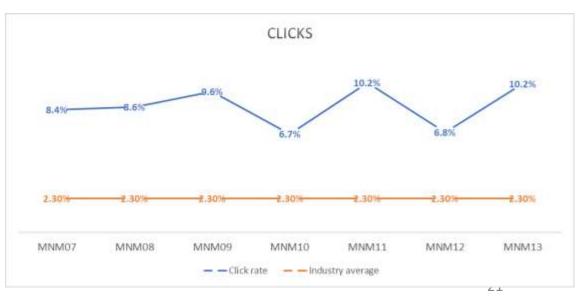
## E. Events and Communications: Comms (1/13)

## MNM - Monday Night Mail (1/3)

### 7 MNMs published in Q2









# E. Events and Communications: Comms (2/13)

## MNM - Monday Night Mail (2/3)

Issue	1 <sup>st</sup> Most read article	2 <sup>nd</sup> Most read article	3 <sup>rd</sup> Most read article
MNM07	Further memories of Professor Gérard de Soete (1928-2019)	Peabody betting on going against the grain, but arguments for continued high use of coal not entirely persuasive	Swimming fish could be key to generating electricity for UK homes
MNM08	A review of 'The "New Energy Economy": An Exercise in Magical Thinking' published by the Manhattan Institute	Energy-from-waste: new UK government strategy points the way forward	IFRF's Comitato Italiano hosts combustion seminar in Pisa
MNM09	Annual Report 2018	IChemE event planner	INFUB-12: 12th European Conference on Industrial Furnaces and Boilers
MNM10	Clean Energy Science Lecture	IEA reports that CO <sub>2</sub> emissions are still rising	RJM exhibits at World Waste to Energy Summit
MNM11	Energy-from-waste: UK's largest waste wood gasifier operational	The Clean Energy Science Lecture and Workshop on Combustion-Related Research to be held in London, UK	Air Products launches new oxy-fuel burner for glass industry
MNM12	Full steam ahead to a hydrogen future!	INFUB-12 Abstract Submission	H2020 NZE calls
MNM13	Airlines under increasing scrutiny for spiralling carbon emissions	Comité Français' General Meeting held in Piacenza	Tributes to the late Professor János Miklós Beér (1923-2018) at the Clearwater Clean Energy Conference



## E. Events and Communications: Comms (3/13)

### MNM refresh and redesign:

- Redesign of MNM completed ready for launch in July
- Plan to launch opening MNM subscription to non-members (from July)



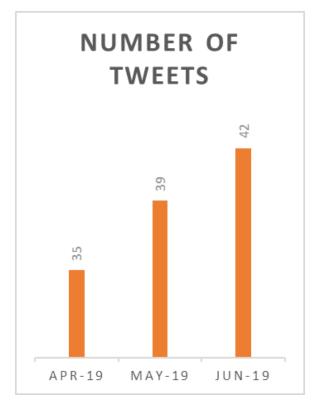
- Produced editorial guidelines and member profiling pitch
- Liaised with member MCPs to clean member email subscriptions to MNM
- Liaising with members and NCs regarding MNM editorials and member profiling
- Collated member social media accounts for reference in future MNMs
- Researched vlogs and podcasts as a potential future communication channel for MNM



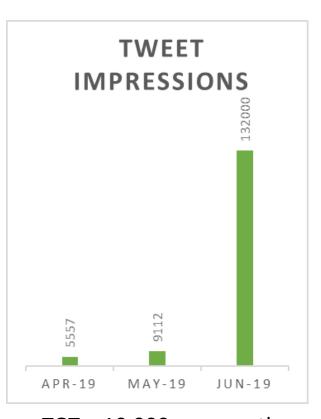
## E. Events and Communications: Comms (4/13)

## Social media (1/4)

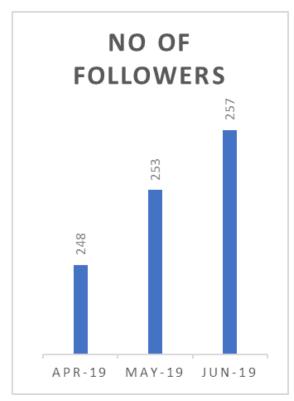




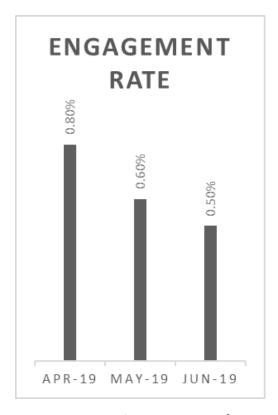
TGT = 40 per month



TGT = 10,000 per month
Impressions = reach of tweets



No TGT set



TGT = 1% per month

Rate of an engagement with a tweet (i.e. a retweet) against the number of impressions



## E. Events and Communications: Comms (5/13)

## Social media (2/4)

### LinkedIn Company page

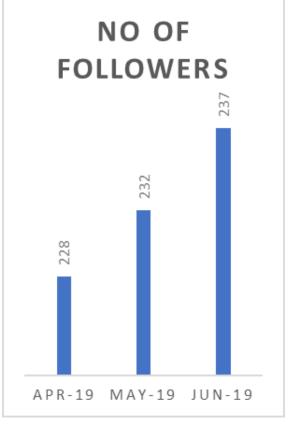




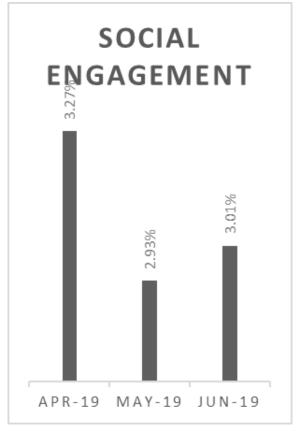
TGT = 40 per month



TGT = 1,000 per month



No TGT set



TGT = 1% per month



## E. Events and Communications: Comms (6/13)

## Social media (3/4) LinkedIn Group





Number of group conversations = 12

(-8 from last quarter)



Number of group comments = 0

(same as last quarter)



Number of group likes = 10

(-7 from last quarter)



Number of group members = 618

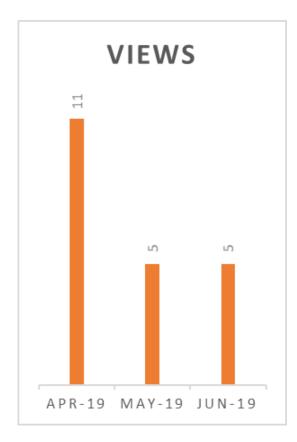
(+9 from last quarter)



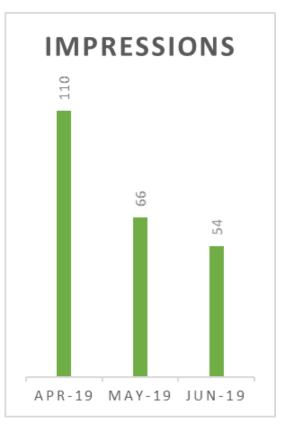
## E. Events and Communications: Comms (7/13)

## Social media (4/4)





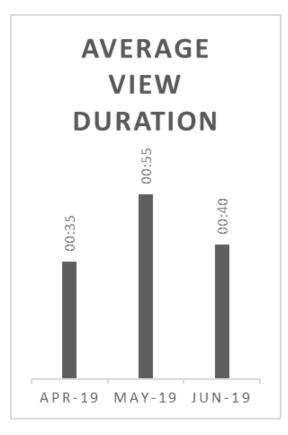
TGT = 15 per month



TGT = 100 per month



No TGT set

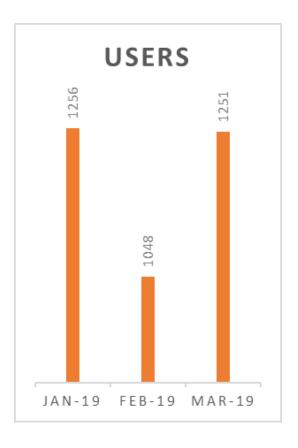


TGT = 1:00 per month

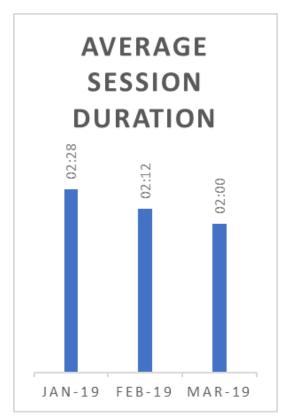


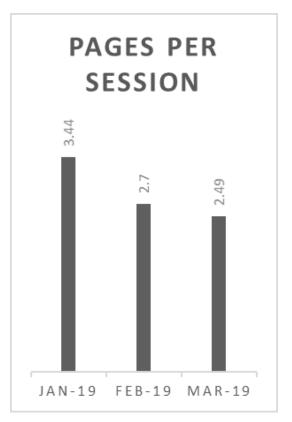
## E. Events and Communications: Comms (8/13)

## Website (1/3):











# E. Events and Communications: Comms (9/13)

## Website (2/3): Top 10 users by country

#	Country	Number of users in Q2			
1	USA	779			
2	UK	439			
3	Germany	234			
4	Finland	203			
5	France	174			
6	Sweden	166			
7	Italy	130			
8	India	112			
9	Canada	103			
10	South Korea	99			

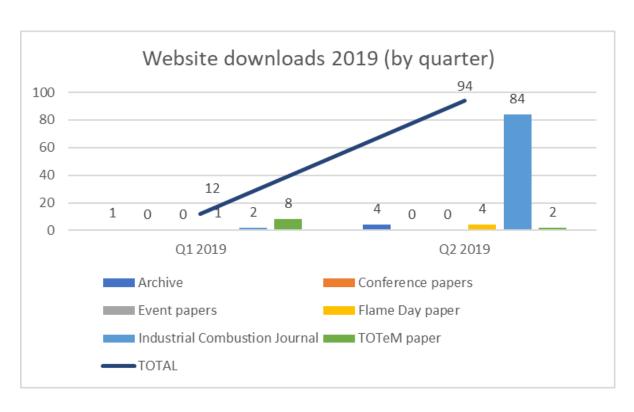
### Top 10 pages viewed

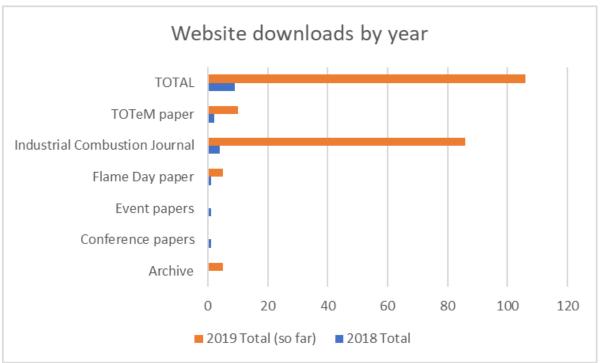
#	Page	Number of users in Q2
1	Home	1100
2	EVENT: Nordic Flame Days 2019	897
3	Research	391
4	News and Blogs	390
5	IFRF Blog: Green & blue hydrogen	357
6	Events	249
7	Members	240
8	About	198
9	Become a member	175
10	Industrial Combustion Journal	174



## E. Events and Communications: Comms (10/13)

## Website (3/4): Downloads







## E. Events and Communications: Comms (11/13)

## Website (4/4): Functionality

- Website bugs resolved
- CRM implemented onto main site
- Tagging system created and tested





## E. Events and Communications: Comms (12/11)

## Marketing (1/1):

- Professional photographs of staff produced
- Discussions with WDD regarding redesigning e-flyers and draft design produced











- A not-for-profit research foundation
- A global reference point for clean, efficient and safe industrial combustion
- throughout the international combustion community, and to advancing research into
- Underplaned by a 'BO-strong network of dembers (industrial companies, academic National Committees: American Flame (AFRC), British Rame (BFRC), Florish Flame

#### Our mission

To advance applied combustion research and promote cooperation and information transfer throughout the international combustion community.

#### Our values

Advancing applied research for safe clean and efficient combustion, and facilitating cooperation, information development throughout the International combustion community

What IFRF does o Events and networking FRF hosts TOTaMs (T

#### Research

- o IFRF archive including research papers and presentations FRF's research archive dates back to our very beginning - 1948. Research papers, presentations and articles from the past 70+ years can
- o Industrial Combustion Journal Industrial Combustion (ISSN 2075-307f) is our online journal, publishing research on the gractical and theoretical aspects of combustion

FRF works dosely with a range of

science in industrial applications. o Preferred research partners



- Subscription to Monday Night Mail (MNM) IFRE's bi-weekly e-newsletter
- Access to the members area of the IPRF
- Access to the FRF archive including past papers and presentations at IFRF events\*
- Access to the Combustion Handbook Access to the Buropean Facilities Database
- Discounts at FRF and FRF-related events including webiners and training Promotional opportunities in WHM: IFR

#### What is the IFRF member

The IFDF member network reaches across the alobe and includes 130+ organisations representing the power generation, petroleum refining, ren and steel, coment, glass, and chemical manufacturing industries as well as combustion equipment manufacturers, fuels and industrial gas producers and distributors, research institutes and

#### What are the National Committees?

universities.

#### Current National Committees:

- e American Flame Research Committee (AFRC)
- e British Rame Research Committee
- o ChineseFlame (CFRC)
- e Comité Français (CF)
- e Comitato Italiano (CI)
- bi-weekly newsletter Monday Night Mail - as well as shared on our website and our e CommanFlame (DVV) o Finnish Flame Research Committee social media pages.
- @ Dutch Flame (NVV)
  - Examples of papers published:

community promptly.

The Industrial Combustion Journal is

IFRF's online lournal and is dedicated

to publishing the best research on

practical and theoretical aspects of

Emphasis is given to scientific content

clean and efficient fuel conversion.

Papers are peer reviewed and available

which can ultimately contribute to safe,

exclusively online meaning that high quality

research/smade available to the scientific

Each paper published is shared through our

combustion science related to

industrial applications.

### Who can submit to it?

Industrial Combustion Journal

Paper submissions are open to all. Submissions are reviewed by two of the Journal's Editorial Board before publication.

The Editorial Board is a collection of combustion experts from inclustry and academia who have experience of publishing leading-edge combustion research

#### How to submit a paper?

Head to the industrial Combustion Journal section of the FRF website to

https://tirt.net/research/industrial-combustion-journal/ https://thtnet/research/industrial-combustion-journal/submit-a-paper/ We consider all papers on the condition that they have been submitted only to us

and are not already published.

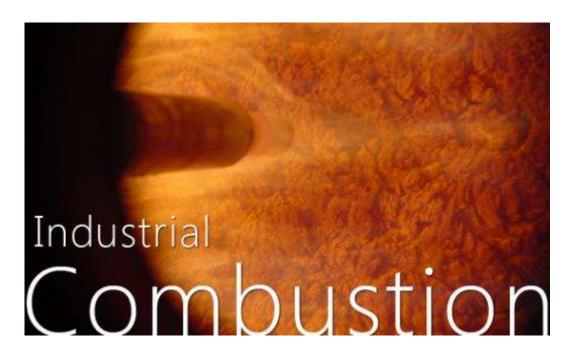


## E. Events and Communications: Comms (13/13)

## **Industrial Combustion Journal (1/1):**

### 0 papers published in Q2 (year to date = 0)

- Three papers submitted for review in Q2
- Number in progress (inc. new papers submitted in Q) = 12
- Paper review process assessed and plan produced
- Email pool created for editorial board
- Tried to contact John Oakey (editor) to propose new process





## F. Resources

#	Goal	Year	Who	SitRep
F1	Contract Exec Dir for 96 days/yr. (2019) at affordable dayrate (fixed for three years) – annual	2019	GenS	Completed - 2019 contract approved by Council
F2	Increase Lucy Straker's employment from 90% FTE to full-time w.e.f. 1/1/2019	2019	PS	Completed
F3	Maintain current level of effort from Patrick Lavery; negotiate CIN rate annually	2019	PS (PL)	Completed - 2019 contract approved by Council
F4	Contract other ad hoc support on project/item basis as needed, costs borne by project/item	2019	PS	Wilkinson Photography used for staff photographs
F5	Increase T&S budget to £15k/yr. as affordable [to £10k/yr. as appropriate]; maintain all other overhead budget lines	2019	LS	Completed – budget agreed

- Patrick Lavery contract approved by Council
- PS contract approved by Council