

22-24 June, Leiden

Parallel Session (B.026)

Public Engagement & Science Communication

AESIS

#IOS22



22-24 June, Leiden

Paul Manners

Founding Director, National Co-ordinating Centre for Public Engagement (NCCPE), United Kingdom

AESIS

Public engagement and science communication

What are the obstacles and opportunities of (social) media in bridging the communication between science and society?

Paul Manners (Chair) Founding Director, National Co-ordinating Centre for Public Engagement, United Kingdom

Ger Hanley Founder of Write Fund, Republic of Ireland

Dariusz Aksamit Head of Council of March for Science Foundation, Poland

Current public support



More than half of people say they are "interested in science, but have no strong connection to it"



Younger people are less likely to feel that science will enhance the UK's competitive edge, or that research drives economic growth

From our focus groups in May 2022:

"We've been doing scientific research for ages and it's not helped"

"I think the majority of people would be much happier" – responding to a scenario where the Government halves its target for R&D investment, to fund other priorities







THEY NEED EVIDENCE

UNDERSTAND THAT

KNOWLEDGE

IS IMPORTANT

A SENSE WONDER &

PROGRESS AND TRUTH

Are not afraid to THINK hard



JUST BECAUSE YOU BELIEVE IN SOMETHING THAT HAS BEEN PROVED BY SCIENCE DOESN'T MAKE YOU SPECIAL, EVERYONE IN GENERAL SHOULD BE MORE HUMBLE



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Ger Hanley

Founder of Write Fund, Republic of Ireland

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Due to copyright reasons, the speaker has asked for her slides to not be shared

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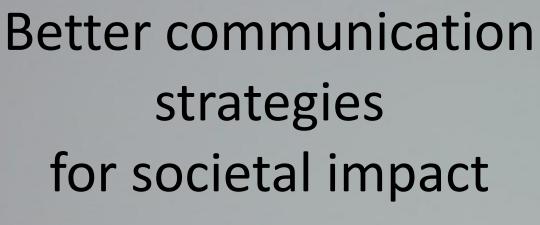
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Dariusz Aksamit

Head of Council of March for Science Foundation,

Poland

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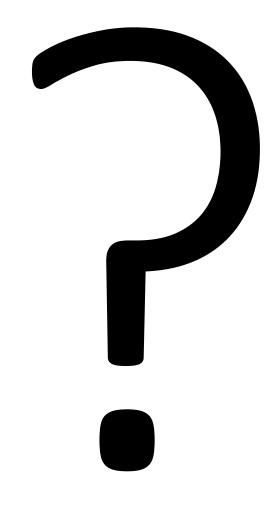


Dariusz Aksamit
March for Science Foundation

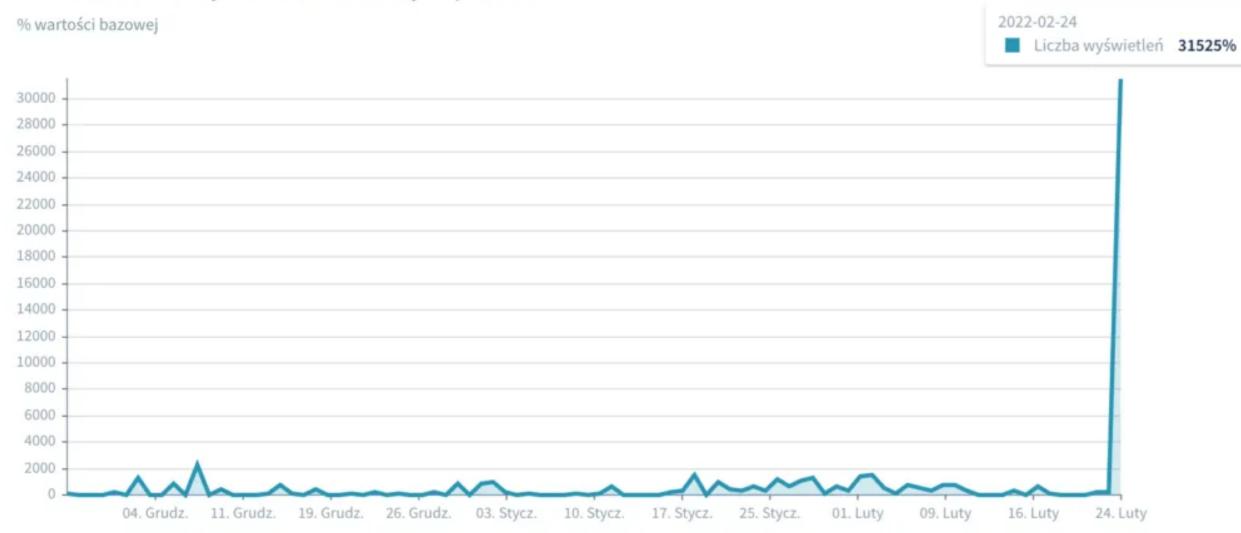
https://www.facebook.com/AksamitD/

AESIS Impact of Science 2022





Średnia liczba wyświetleń w naszym portalu

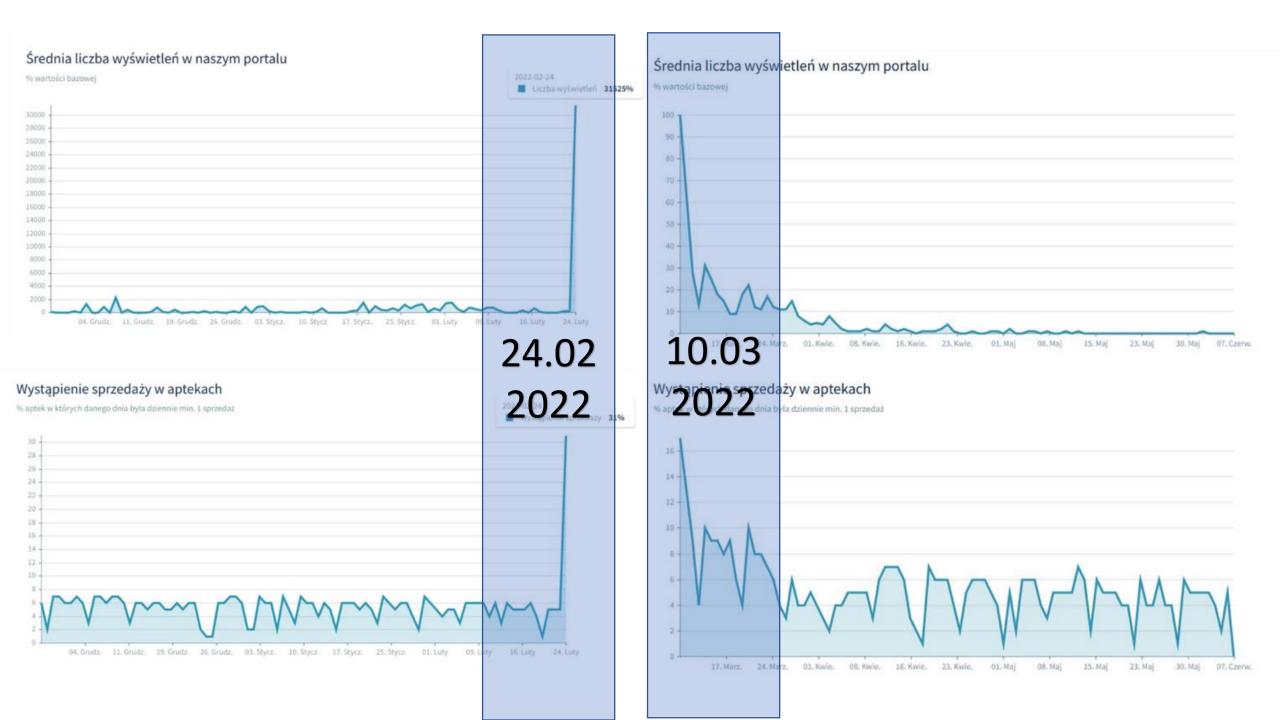


Średnia liczba wyświetleń w naszym portalu





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K Ca Sc	Ti	Cr Mn	Fe Co	Ni Cu	Zn Ga	Ge As	Se B	r Kr
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Cs Ba	∣ Hf ∣ Ta	∣ W ∣Re	Os Ir	Pt Au	Hg Tl	Pb Bi	Po A	t Rn
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87 [223] 88 [226] 89-103-	104 [267] 105 [268			8] 110 [281] 111 [282			· ·	
Fr Ra	Rf Db	Sa Bh	Hs Mt	De Ba	Cn Nh	FI Mo	LVT	
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*H: [1,00784, 1,00811] Li: [6,938, 6,997]								
B: [10,806, 10,821] C: [12,0096, 12,0116]	57 138,9 58 140	,1 59 140,9 60 144,	2 61 [145] 62 150	0,4 63 152,0 64 157,3	3 65 158,9 66 162,5	67 164,9 68 167	7,3 69 168,9 70 1	73,0 71 175,0
N: [14,00643, 14,00728] O: [15,99903, 15,99977]		Dr Nd	Dm Sm	Eulca	Th Dy	LAE	Tm VI	
Mg: [24,304, 24,307] Si: [26,084, 26,086]	La Ce		Pm Sm		Tb Dy			
S: [32,059, 32,076]	lantán cérium			m európium gadolíniun	-			
Cl: [35,446, 35,457] Br: [79,901, 79,907]	89 [227] 90 232		-	4] 95 [243] 96 [247			7] 101 [258] 102 [2	
Tl: [204,382, 204,385] Zn: 65,38(2)	⊣ Ac ∣ Th	∣Pa∣ U	Np Pu	ı ∣Am∣Cm	Bk Cf	Es Fm	ı∣Md∣N∢	o Lr
Se: 78,96(3) Mo: 95,96(2)		protaktínium urán	neptúnium plutóniu		berkélium kalifornium		n mendelévium nobéli	um laurencium
MO. 93,90(2)								













Everyone knows that Lugols solution protects from radiation!

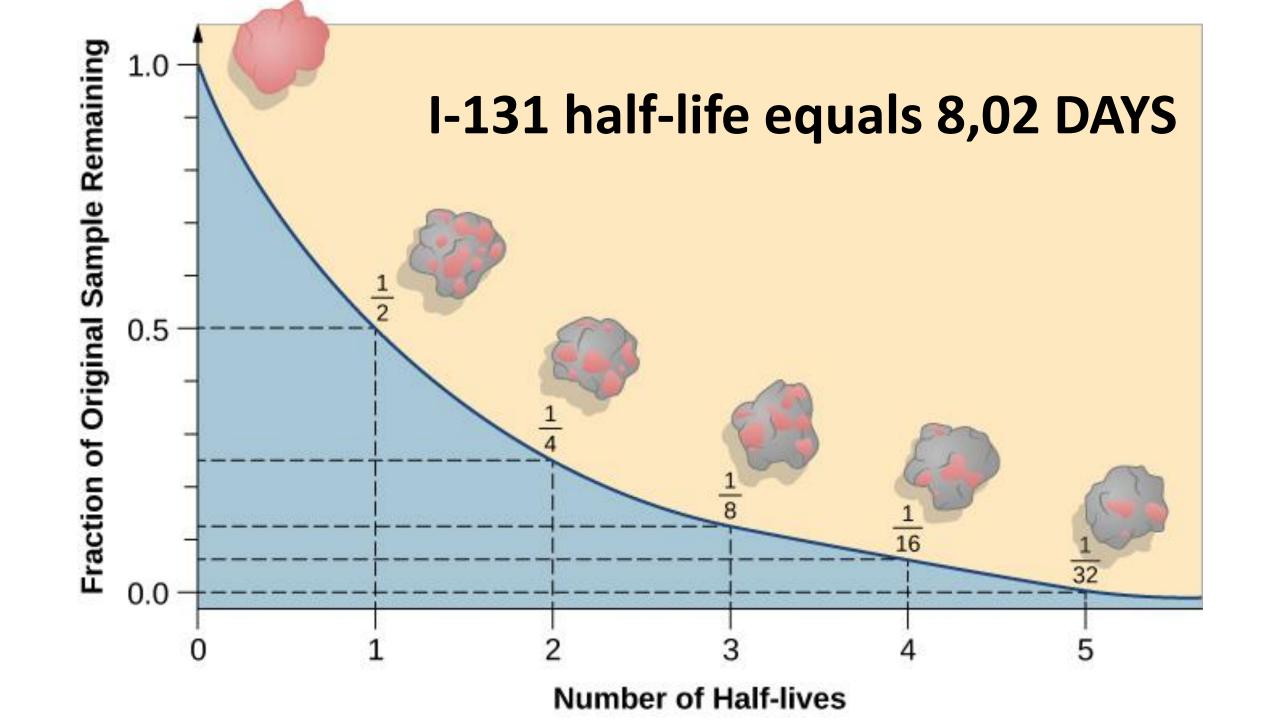
Everyor tracws that hus os solution protests from radiation!

But this is not true!!!

Massive prophylaxis operation was NOT combined with massive education

1 18 I.A. VIII. A. 1,008* 4,003 Н не 13 15 16 17 1986.... 14 V.A. III. A. IV. A. VI. A. II. A. VII. A. hidrogén hélium 6,94* 9,012 10,81* 6 12,01* 7 14,01* 8 16,00* 9 19,00 10 20,18 В Be Ν Ne () berillium lítium bór szén nitrogén oxigén fluor neon 22,99 12 24,31* 13 26,98 14 28,09* 30,97 16 32,06* 17 35,45* 18 39,95 S Na Ma ΑI 5 10 11 12 I.B. III. B. V.B. VII. B. VIII. B. IV. B. VI. B. II. B. lmagnézium alumínium szilícium foszfor kén klór argon 39,10 20 40.08 21 44.96 22 58,93 28 58,69 29 63,55 30 65,38* 31 69.72 32 72.63 33 47,87 23 50,94 24 52,00 25 54,94 26 55,85 27 74.92 34 78.97* 35 79.90* 36 83.80 Sc Ga Br Kr Mn Fe Co Ni Zn Se Ca Cu Ge As vanádium kálium kalcium szkandium titán króm mangán vas kobalt nikkel réz cink gallium germánium arzén szelén bróm kripton 88,91 40 91,22 | 41 92,91 | 42 95,95* | 43 [98] | 44 101,1 | 45 102,9 | 46 106,4 | 47 107,9 | 48 112,4 | 49 114,8 | 50 118,7 | 51 121,8 | 52 127,38 87.62 39 53 126,9 54 131,3 85,47 Pd Rb Rh Sb Nb Ru Sn Xe Mo IC Αg Ca ıe molibdén technécium cirkónium nióbium ruténium ródium palládium ezüst indium ón antimon tellúr stroncium ittrium kadmium xenon 197,0 80 200,6 81 204,4* 82 207,2 83 209,0 84 [209] 85 [210] 86 132,9 56 137,3 57-71-72 178,5 73 180,9 74 183,8 75 186,2 76 190,2 77 192,2 78 195,1 79 [222] Pb Hf Bi Po Cs Ba Re Os Hg Rn Ia Au polónium asztácium cézium bárium hafnium tantál volfrám rénium ozmium irídium platina arany higany tallium ólom bizmut radon 104 [267] 105 [268] 106 [269] 107 [270] 108 [277] 109 [278] 110 [281] 111 [282] 112 [285] 113 [286] 114 [289] 115 [290] 116 [293] 117 [294] 118 [294] [223] [226] 89-103-Rg Fr Ra Bh Mc francium rádium radzerfordium dubnium sziborgium borium | hasszium | meitnerium | darmstadtium | röntgenium | kopernícium | nihonium | flerovium | moszkovium | livermorium | tennesszin | oganesszon *H: [1,00784, 1,00811] Li: [6,938, 6,997] B: [10,806, 10,821] $\begin{bmatrix} 57 & 138,9 & 58 & 140,1 & 59 & 140,9 & 60 & 144,2 & 61 & [145] & 62 & 150,4 & 63 & 152,0 & 64 & 157,3 & 65 & 158,9 & 66 & 162,5 & 67 & 164,9 & 68 & 167,3 & 69 & 168,9 & 70 & 173,0 & 71 & 175,0 & 71 & 71,0 & 71,0$ C: [12,0096, 12,0116] N: [14,00643, 14,00728] Nd Pm | Sm | Eu Dy Er 0: [15.99903, 15.99977] Gd La Ce I D HO Tm Υb Mg: [24,304, 24,307] Si: [26,084, 26,086] prazeodímium neodímium prométium szamárium európium gadolínium lantán terbium diszprózium holmium erbium túlium itterbium lutécium S: [32,059, 32,076] [237] 94 [244] 95 [243] 96 [247] 97 [247] 98 238,0 93 [252] 100 [257] 101 [258] 102 [259] 103 [266] CI: [35,446, 35,457] [227] 90 232,0 91 231,0 92 [251] 99 Br: [79,901, 79,907] Bk Pa TI: [204,382, 204,385] Cm Fm AC Ιh Ma Zn: 65,38(2) Se: 78,96(3) aktínium tórium protaktínium neptúnium | plutónium | amerícium | kűrium | berkélium | kalifornium | einsteinium | fermium | mendelévium | nobélium | laurencium urán Mo: 95,96(2)





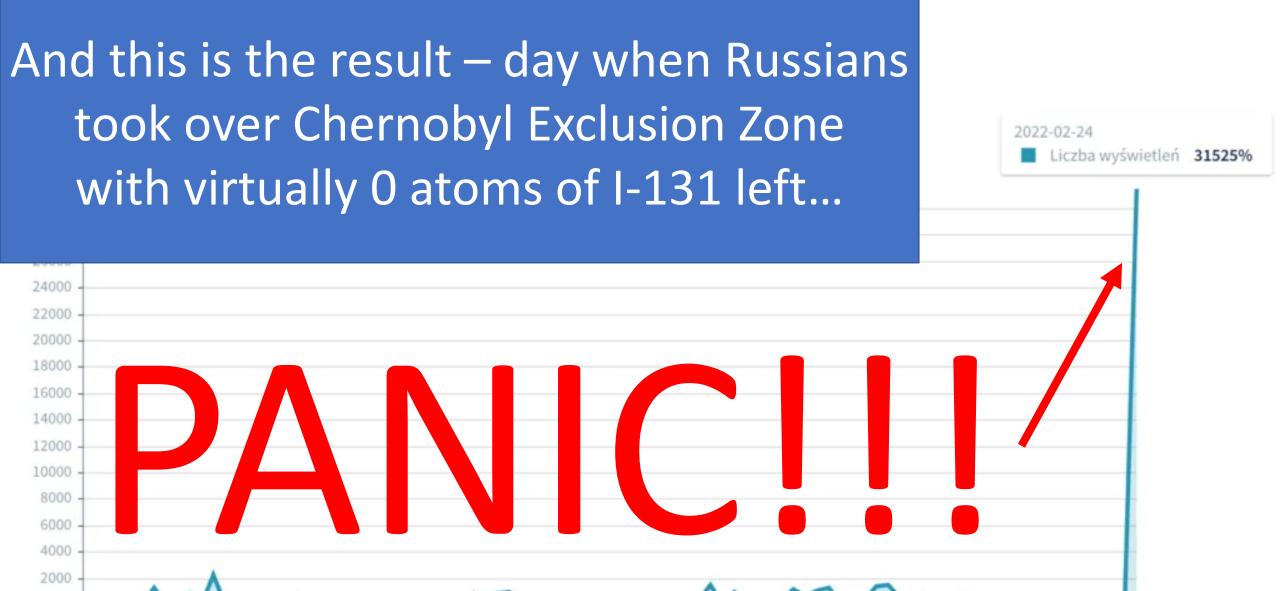
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3 6,94* 4 9,012						5 10,81*	6 12,01*	7 14,01*	8 16,00*	9 19,00	10 20,18
Li Be						В		N	0	F	Ne
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lítium berillium 11 22,99 12 24,31*						bór 13 26,98	szén	nitrogén 15 30,97	oxigén 16 32,06*	fluor 17 35,45*	neon 18 39,95
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Na Mg 3	4 5	6 7	8 9	10 11		AI	Si	P	S	CI	Ar
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K Ca Sc	∣ Ti ∣ V	Cr Mn	Fe Co	Ni C	u Zn	Ga	Ge	As	Se	Br	Kr
kálium kalcium szkandiun	n titán vanádium			nikkel ré			germánium	arzén	szelén	bróm	kripton
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Rb Sr Y	Zr Nb	Mo TC	Ru Rh	Pd A		In	Sn	Sb	ıe		Xe
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55 132,9 56 137,3 57-71	72 178,5 73 180,9	74 183,8 75 186,	2 76 190,2 77 192,2	2 78 195,1 79	197,0 80 200,6	81 204,4*	_		84 [209]	85 [210]	86 [222] —
Cs Ba	∣ Hf ∣ Ta	∣ W ∣Re	∣Os∣ Ir	Pt A	u Hg	TI	Pb	Bi	Po	At	Rn
cézium bárium	hafnium tantál	volfrám rénium	ozmium irídium	platina ara		tallium	ólom	bizmut	polónium	asztácium	radon
87 [223] 88 [226] 89-103 ₇	104 [267] 105 [268] 106 [269] 107 [270	108 [277] 109 [278] 110 [281] 111	[282] 112 [285]	113 [286]	114 [289]	115 [290]	116 [293]	117 [294]	118 [294]
Fr Ra	Rf Db	Sg Bh	Hs Mt	Ds R	g Cn	Nh	FI	Mc	Lv	Ts	Oa
				1	_						Og
francium rádium	radzerfordium dubnium	sziborgium borium	hasszium meitneriun	n darmstadtium röntge	nium kopernicium	nihonium	flerovium	moszkovium	livermorium	tennesszin	oganesszon
*H: [1,00784, 1,00811] Li: [6,938, 6,997]											
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N: [14,00643, 14,00728] O: [15,99903, 15,99977]		Dr Nd	Dm Sm			Dv	Ц	Er	Tm	Vh	1
Mg: [24,304, 24,307]	4 La Ce	Pr Nd	Pm Sm	Eu G	u I b	Dy	по	Er	Tm	Yb	Lu
Si: [26,084, 26,086] S: [32,059, 32,076]	lantán cérium		n prométium szamárium					erbium	túlium	itterbium	lutécium
Cl: [35,446, 35,457] Br: [79,901, 79,907]	89 [227] 90 232,0	91 231,0 92 238,	0 93 [237] 94 [244] 95 [243] 96	_	_		100 [257]	101 [258]	102 [259]	103 [266]
TI: [204,382, 204,385] L	∣ Ac ∣ Th	Pa U	Np Pu	Am Cı	n Bk	Cf	Es	Fm	Md	No	Lr
Se: 78,96(3)	aktínium tórium	protaktínium urán	neptúnium plutónium								laurencium
Mo: 95,96(2)	333111	J	- P. S. S. HOLL								

Massive prophylaxis operation was NOT combined with massive education

...so milions of people have STRONG (but FALSE!)

"memories"

that Lugol's solution protects from radiation in general



17. Stycz.

10. Stycz.

25. Stycz.

09. Luty

16. Luty

24. Luty

11. Grudz.

19. Grudz.

26. Grudz.

03. Stycz.

Belarusian involvement Latvia in the 2022 Russian invasion of Ukraine Russian temporary bases and places of concentration of ground forces Russian permanent bases (not involved in invasion) Belarusian military airbases used by the Russian air force to bomb Ukraine Temporary helicopter airbases used by the Russian army Russia Directions of Russian ground offensive (as of 15 March 2022) Evidences of missile launches Belarusian hospitals allegedly used to treat Russian soldiers wounded Belarus Meya VLF transmitter Belarus in Ukraine Permanent bases of military units of Belarusian army, excluding auxiliary (not involved in invasion) Lithuania Russian planes (attack aircrafts?) Mahilioŭ (Mogilev) Hrodna (Grodno) poland Russian planes (AEW&C) Slonim Russian planes (fighters/attack aircrafts, Hantsavichy radar station (early warning radar) AEW&C planes) and helicopters Gomel Witness reports and photos of missile launches Russian planes 11 March border incident Chernihiv •Rivne Ukraine Kyiv (Kiev) OZhytomyr

Responce

As a group of radiation experts, we immediately posted an offer for journalist to consult on this topic, giving basic informations to disseminate





Builing community of experts
Non-political



March for Science Foundation (Poland)

Buiding relations
with a society
Public engagement

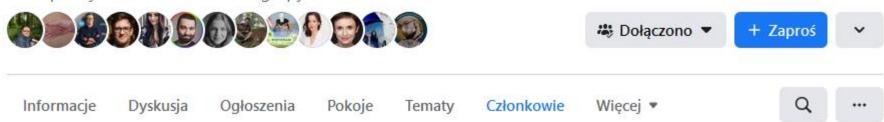
"Science & Media Congress" since 2018



"Science in media" closed group for journalists and scientistists / science communicators



Rzecznicy Nauki - nauka w mediach



'Grave concern' as Ukraine Zaporizhzhia nuclear plant under Russian orders

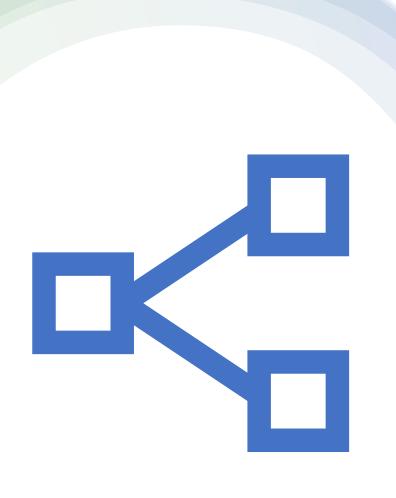
https://www.theguardian.com/world/2022/mar/06/ukraine-zaporizhzhia-nuclear-plant-staff-under-russian-orders

International Atomic Energy Agency says Russian military orders of staff at nuclear plant violate international safety protocols



□ Rafael Grossi, director general of IAEA, points on a map of Zaporizhzhia nuclear power plant at press conference in Vienna, Austria on 4 March. Photograph: Joe Klamar/AFP/Getty Images

Staff at Ukraine's Zaporizhzhia nuclear power plant are being told what to do by the Russian military commander who seized the site last week, in violation of international safety protocols. We established non-official and fast communication channel – by Messenger.
Unfortunately it was used a few times more...



Conclusion 1

PREPARDNESS: building and maintaining a strong, friendly an trustworthy relationship with journalist is crucial.



Conclusion 2a

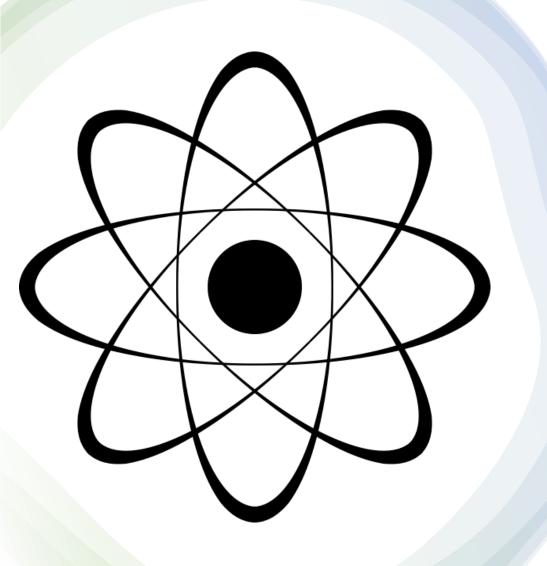


Social media are great for crisis communication thanks to time of reactions, much faster than official agencies (though IAEA reacted greatly!)

Conclusion 2b

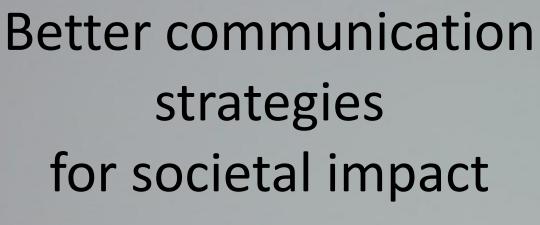


We need more SCIENCE INFLUENCERES



Conclusion 3

It's important to build your own narrative:) Some "green" politics tried to use those stories to foster a black PR of NPP, though we were arguing just the opposite.



Dariusz Aksamit
March for Science Foundation

https://www.facebook.com/AksamitD/

AESIS Impact of Science 2022



Public engagement and science communication

What are the obstacles and opportunities of (social) media in bridging the communication between science and society?

- •What's the problem?
- •What can we do about it?



22-24 June, Leiden

Next up

13.00 Lunch break 2nd Floor

14.00 Plenary Closing Panel C131

15.30 Closing Reception 2nd Floor

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#IOS22



22-24 June, Leiden

Recommendation

Community Engagement & Citizen Science

"We need to move beyond citizen science as a methodology towards a collaborative mindset with tangible mutual benefits. Diverysity, equity and inclusion in early stages of the process can value and integrate multiple community knowledge cultures to achieve a sutainable impact aligned with societal needs."