SANDA meeting – status of WP2

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Participants in WP2

Work package number	WP2	24 participants		Lead beneficiary		CIEMAT	
Work package title	New nuclear data measurements for energy and non-energy applications						
Participant number	1	3	5	6	7	8	10
Short name of participant	*CIEMAT*	CEA	CNRS	CSIC	CVREZ	ENEA	IFIN-HH
Person-months per participant	14.3	7.1	21	14.4	11.7	15	11.2
Participant number	11	12	13	15	17	18	20
Short name of participant	IRSN	IST	JRC	JYU	NPI	NPL	NTUA
Person-months per participant	1.5	4	17.2	5	17.3	2.3	6
Participant number	22	23	27	29	30	31	33
Short name of participant	PTB	SCK	ULODZ	UMANCH	UOI	UPC	USC
Person-months per participant	4	2.2	12	10	6	1.8	10
Participant number	34	35					
Short name of participant	USE	UU					
Person-months per participant	10	9					
Start month	1			End month	60 (extended)		

WP2 tasks and subtasks

Task 2.1: Neutron induced fission and charged particle production cross sections

Task coordinator: ***UMANCH****, partners:* ***CNRS/CENBG, CNRS/LPCC, CVREZ, NPI-CAS, NTUA, UOI, UU***

2.1.1: Neutron induced fission cross sections
2.1.2: Neutron induced charged particle production cross sections

Task 2.2: Neutron capture cross sections

Task coordinator: ***ENEA****, partners:* ***CIEMAT, JRC, ULODZ, IRSN***

2.2.1. Capture measurements of fissile isotopes.
2.2.2. Capture measurement of stable isotopes.

Task 2.3: Neutron elastic and inelastic scattering and neutron multiplication cross sections

Task coordinator: ***IFIN-HH****, partners:* ***CNRS/IPHC, JRC***

WP2 tasks and subtasks

Task 2.4: Decay data measurements

Task coordinator: ***CSIC****, partners:* ***CEA/LNHB, CNRS/Subatech, CSIC, JRC, SCK, UPC***

2.4.1. Beta decay measurements with TAGs.
2.4.2. Beta delayed neutron measurements.
2.4.3. Measurement of half-live and gamma-ray emission probabilities of beta emitters.

Task 2.5: Fission yields measurements

Task coordinator: ***UU****, partners:* ***CEA/IRFU, CNRS/LPSC, UJY, USC***

2.5.1. Fission yield studies in (n,f) reactions.
2.5.2. Fission yield studies in inverse kinematics.

Task 2.6: New measurements for non-energy applications

Task coordinator: ***USE****, partners:* ***IST, NPL, PTB***

2.6.1. Spectrum averaged cross sections for dosimetry.
2.6.2. Measurement of cross sections relevant for hadron therapy.
2.6.3. Measurement of beta+ emitters.

Rel. Del. No	Del No	Title	Description	Lead Beneficiary	Nature	Dissemination Level	Est. Del. Date (annex I)	Receipt Date	Approval Date	Status
D2.1	D9	Report on the (n,f) cross section measurements	Report on the (n,f) cross section measurements	UMANCH	Report	Public	31 Aug 2023	21 Jan 2024		Submitted
D2.2	D10	Report on the (n,chp) cross section measurements	Report on the (n,chp) cross section measurements	CNRS	Report	Public	29 Feb 2024			Pending
D2.3	D11	Report on the 239Pu(n,g), 92,94,95Mo(n,g) cross measurements at n_TOF and GELINA	Report on the 239Pu(n,g), 92,94,95Mo(n,g) cross measurements at n_TOF and GELINA	ENEA	Report	Public	30 Apr 2024			Pending
D2.4	D12	Report on the 239Pu, 233U, 14N and 35,37Cl inelastic cross section measurements at GELINA	Report on the 239Pu, 233U, 14N and 35,37Cl inelastic cross section measurements at GELINA	IFIN-HH	Report	Public	31 Jul 2024			Pending
D2.5	D13	Report on the measurements of the branching ratio for 209Bi, 208Pb(n,tot) and 238U(n,inel) cross sections at GELINA.	Report on the measurements of the branching ratio for 209Bi, 208Pb(n,tot) and 238U(n,inel) cross sections at GELINA.	JRC	Report	Public	30 Apr 2024			Pending
D2.6	D14	Report of the decay data measurements performed with DTAS and BELEN	Report of the decay data measurements performed with DTAS and BELEN	CSIC	Report	Public	31 Aug 2023	21 Jan 2024		Submitted
D2.7	D15	Report on the development of a new technique for obtaining low resolution information on the beta delayed neutron energies with BELEN-like detectors.	Report on the development of a new technique for obtaining low resolution information on the beta delayed neutron energies with BELEN-like detectors.	UPC	Report	Public	28 Feb 2022	13 Jun 2023		Submitted
D2.8	D16	Report on the method based on the PI-ICR technique for general fission product yield studies at JYFL	Report on the method based on the PI-ICR technique for general fission product yield studies at JYFL	JYU	Report	Public	30 Nov 2023	15 Dec 2023	20 Jan 2024	Approved

Rel. Del. No	Del No	Title	Description	Lead Beneficiary	Nature	Dissemination Level	Est. Del. Date (annex I)	Receipt Date	Approval Date	Status
D2.9	D17	Spectrum averaged cross sections for dosimetry	Spectrum averaged cross sections for dosimetry	NPL	Report	Public	30 Apr 2024			Pending (posible delay)
D2.10	D18	Report on the measurement of double-differential charged-particle emission cross sections at the CERN n_TOF facility in the neutron energy range from 20 MeV to 200 MeV	Report on the measurement of double-differential charged-particle emission cross sections at the CERN n_TOF facility in the neutron energy range from 20 MeV to 200 MeV	PTB	Report	Public	30 Apr 2024			Pending
D2.11	D19	Report on the production cross sections of beta+ emitters used for range verification in proton therapy.	Report on the production cross sections of beta+ emitters used for range verification in proton therapy.	USE	Report	Public	28 Feb 2022	08 Mar 2023	12 Jun 2023	Approved
D2.12	D20	Report on the fission yield studies with the LOHENGRIN spectrometer at ILL	Report on the fission yield studies with the LOHENGRIN spectrometer at ILL	CNRS	Report	Public	31 Aug 2023			Aproved (non OA publicacation)
D2.13	D21	Report on fission yield studies with FALSTAFF at NFS	Report on fission yield studies with FALSTAFF at NFS	CEA	Report	Public	31 Dec 2023	21 Sep 2023		Approved
D2.14	D22	Report on fission yield studies in inverse kinematics at FAIR	Report on fission yield studies in inverse kinematics at FAIR	USC	Report	Public	30 Jun 2022	23 Oct 2022	17 Feb 2023	Approved
D2.15	D23	Report on the of half-live and gamma-ray emission probabilities of beta emitters measurement	Report on the of half-live and gamma-ray emission probabilities of beta emitters measurement	CEA	Report	Public	31 Aug 2023			Pending (no direct feedback)

Summary and conclusions

- We have 7 deliverables to be submitted between Feb and June. Very tight schedule.
- If any further difficulty with the compromised work is found, it should be reported very very soon, so that mitigation actions can be adopted.
- The EC has requested to send the reports together with a public version of the data. If not sent to EXFOR, a table should be attached.
- Reports can be completed with Open Access publications, preprints (Arxiv) or public versions of the papers.
- Verify that all papers & presentations acknowledge the SANDA funding properly.
- Report whatever communication (conferences, workshops, schools…) related to SANDA.