



# CT2M OVERVIEW AND CONSULTANTS RESUMES





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#### 1 Strong points of the offer and commitments of CT2M

#### □ Recognized experience and in-depth knowledge of the field

- ✓ CT2M has been training and accompanying companies, organizations and laboratories <u>for</u> more than 25 years in the fields of quality, metrology and estimation of uncertainties.
- ✓ CT2M focuses its training and accompanying on the practice and knows how to <u>adapt their</u> content to the requests of the client
- ✓ CT2M is working in all the field of activities

#### □ A young and dynamic team of specialists

- ✓ CT2M offers you a <u>team of engineers</u> that is versatile, responsive, competent, dynamic, available and user-friendly.
- ✓ The consultants of CT2M have accompanied and are accompanying a lot of calibration and testing laboratories in their <u>accreditation projects</u> (see references), on the implementation of both quality and technical requirements.

#### □ A human-sized company

- ✓ CT2M is composed of ten people to enable a <u>direct relationship with representative</u> (consultants, laboratory staff, ...).
- ✓ The skilfullness and plurality of the consultants allow a great flexibility in the planning and potential replacement.

#### ■ A guarantee of independence for the consultants

✓ CT2M is neither supplier of equipment nor calibration provider (except mass calibration) nor partner with any of them. Thus the client has the <u>quarantee of independence</u> of the consultants of CT2M in its trainings and its advices, in particular in the choice of the providers.

#### ☐ Internal experience in quality management, metrology and accreditation

- ✓ CT2M has an integrated quality system with a process approach. The three processes meet the following standards:
  - ISO 17025 for the COFRAC accredited laboratory in mass calibration (accreditation No.2-1292 Scope available on www.cofrac.fr),
  - ISO 17043 for the activity of proficiency testing organizing,
  - AFNOR Certification to the french National Quality Reference System (RNQ): Qualiopi
- ✓ The CT2M engineers have experience in managing a quality management system that complies with the COFRAC requirements. Therefore they have the necessary distance to advise on the simple and effective implementation of a quality system, Metrology and in the estimation of uncertainties;
- ✓ The CT2M consultants are <u>internal auditors</u> and / or <u>COFRAC evaluators</u> according to ISO 17025.



#### CT2M: Mediterranean Technological Center of Metrology

#### Main activities:

#### Training / Consulting / Audit

#### Our mission:

« Supporting companies and laboratories in their Quality and Metrology projects »

#### Possibilities of interventions:

- Training
- Support
- Technical assistance
- Audit / Diagnostic
- Preparation for audit
- Studies / Expertises



#### Organisation of interlaboratory comparisons

#### Our mission:

« Organizing, planning and results processing in accordance with ISO 17043 and ISO 13528 »

#### Possibilities of interventions:

- ✓ Testing: chemical disinfectants and antiseptics, suspended matter, ...
- ✓ Calibration: micropipette, temperature sensors, weighting scales, ...

#### Calibration of masses and internal calibrations

#### Our mission:

« Calibrate and verify masses under COFRAC accreditation »

CT2M has been accredited by COFRAC since 1994 for calibration of masses and therefore has a quality management system and organization in accordance with the requirements of ISO 17025 2017 version.

## 2-1292 - Scope vww.cofrac.fr

#### Possibilities of interventions:

✓ Calibration of masses from 1 mg to 5 T and non standard masses

#### Various information:

Adress: Centre des Creusets Route de Lançon 13250 ST CHAMAS

No. SIRET: 391 762 663 00014

No. of activity declaration: N°93 13 05202/13. This registration does not imply approval of the state. Tel: 04 90 50 90 14 Fax: 04 90 50 89 63 Website: www.ct2m.fr

No. VAT: FR14 391 762 663

ASC code: 7120B

#### 3 Consultants resume



## David BENHAMOU Director / Auditor COFRAC

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Town: Marseille (France)



#### PROFESSIONAL EXPERIENCE



#### Education

- Engineer of INPG (Polytechnic Institute of Grenoble)
- Professional thesis « Quality Management » ENSAM Paris

#### **Professional trainings:**

- Internal auditor qualification (2006) and technical auditor COFRAC (2014)
- Management training Level 2 (2017)
- Training on active pedagogy and digitalization in training (2020)

#### **TRANINGS**

#### **Technical training:**

- <u>Metrology:</u> AP-HM, EDF TEGG, INRA....
- <u>Estimation of uncertainties</u> (tests, calibration, analyzes): Mirion, IRSN, EFS, CEA,...
- <u>Validation of quantitative and qualitative methods:</u> HCL, CH Toulon, IRSN, TOTAL, CNPE EDF, Institut Pasteur, Coca-Cola, LDA 13, ...
- <u>Validation of qualitative methods</u>: ANSES, IFREMER

#### **Quality training:**

- Quality and internal audit according to ISO 17025, ISO 15189 and ISO 9001: INERIS, SNEF, IRSN, SCL, EDF, HCL, LDA 13, ...
- ISO 17025: 2017 and implementation of the Risks and Opportunities approach: Institut Pasteur, IRSN, EDF, Laboratories of analysis, ...

#### **AUDIT - CONSULTING**

ISO 17025, ISO 15189, ISO 17020, ISO 17043 et BPL audits:

More than **150 audits** in the following areas:

- Chemicophysical and microbiological (LAB GTA 05, 23, 27, 29, 59, 78) and radiological (LAB GTA 35) sampling and analyzes,
- Anthroporadiometry, Dosimetry, tests on aerosols / radioactive gases,
- Calibration (T°, Balance, pipettes, H, dimensional, masses, electricity, flow measurement, radioactive sources, standard gases),
- Mechanical tests (traction, ...),

#### **Consulting:**

- Help with filing a COFRAC accreditation application
- Constitution of method validation file
- Performing uncertainty calculations

## Outsourced management of key functions

Metrology manager since 2018 in an accredited lab ISO 17025 and ISO 15189 (LDA 13 – Laboratory of Analysis in South of France)

#### SUPPORT

- Support for the implementation of ISO 17025 and transition: EDF TEGG, ATMO SUD, CTMNC, ...
- <u>Support in metrology and estimaton of uncertainties</u>: EDF TEGG, CH Toulon, Institut Paoli Calmettes, ...

#### **OTHER MISSIONS**

- Coordination of Proficiency testing for EDF and CT2M
- Member of the administration council of the French College of Metrology and International Congress of Metrology

#### Languages:

English: fluentGerman: readingSpanish: reading



#### Laure DOMENECH

Tel: +33(0)6 37 88 67 63 Email: <u>ldomenech@ct2m.fr</u>

Town: Les Pennes Mirabeau

(France)



#### PROFESSIONAL EXPERIENCE



#### **EDUCATION**

• General engineer of the National School of Mines of Albi (ENSTIMAC) - Pharmaceutical Engineering Option

#### PROFESSIONNAL TRAINING

- Level 2 in Management Training (2017)
- Qualification of internal auditor (2006) and COFRAC Quality Evaluator (2021)
- Training on active pedagogy and digitalization in training (2020)

#### TRAINING

#### **Technical training:**

- Metrology through practice: EDF, APHP, CHI Toulon, COCA COLA, HCL, COMURHEX, CNRS, CEA, INRA, Marine Nationale, Colmarienne des Eaux...

Estimation of uncertainties (tests, calibration, analyzes): ORANO LEA, Institut Pasteur, CEREMA, CIRAD, AIA, ...

 Validation of quantitative and qualitative methods: HCL, IUCT, ANSES

#### **Quality training:**

- ISO 17025: 2017 and implementation of the Risks and Opportunities approach: EDF, Laboratoires d'œnologie (FFLOI), Laboratoires Départementaux (ASLAE), Institut Pasteur, IRSN, .
- Quality and internal audit according to ISO 17025, ISO 15189 and ISO 9001: Oenology laboratories (ASLAE, FFLOI, ...), Medical analysis laboratories

#### **AUDIT - CONSULTING**

#### ISO 17025, ISO 15189 audits:

More than **70 audits** in the following areas:

- Chemicophysical and microbiological (LAB GTA 05, 23, 27, 29, 59, 78) and radiological (LAB GTA 35) sampling and analyzes,
- Anthroporadiometry, Dosimetry, tests on aerosols / radioactive gases,
- Calibration (T°, Balance, pipettes, H, dimensional, masses, electricity, flow measurement, radioactive sources, standard gases).
- Mechanical tests (traction, ...),

#### **Consulting:**

- Help with filing a COFRAC accreditation application
- Constitution of method validation file
- Performing uncertainty calculations
- Validation of calculation files

#### Language:

- English: reading, writting, speaking
- German: reading

## Outsourced management of key functions

**Since 2012** 

Quality manager in an ISO 17025 accredited laboratory (NAVAL GROUP - Anthroporadiometry laboratory)

#### SUPPORT

- Support for the implementation of ISO 17025 and transition: EDF DI, NAVAL GROUP Toulon, ROYAL CANIN, IRSN LEDI, LAMMAN of CEA Marcoule, CRT Morlaix, EDQM
- Support for the implementation of ISO 15189: CHU Nîmes, CH Bastia, CH Avignon, CH Ajaccio, Hospices Civils de Lyon, CHI Toulon, Léon Bérard Hospital (Hyères)

#### OTHER MISSIONS

- Technical Manager of the CT2M mass calibration laboratory, COFRAC accredited (N ° 2-1292 Scope available on www.cofrac.fr)
- QHSE manager of CT2M
- Coordination of Proficiency testing in balance calibration



#### **Boris GEYNET**

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Town: Eyguières (France)



#### PROFESSIONAL EXPERIENCE



#### **EDUCATION**

- General engineer of the National Institute of Applied Sciences (INSA Toulouse)
- PhD at the University of Sciences et Technologies of Lille (USTL)

#### MAIN PROFESSIONNAL TRAINING

- Qualification of internal auditor (2009)
- Management Training (2018)
- Training on active pedagogy and digitalization in training (2020)

#### **TRAINING**

#### **Technical training:**

- <u>Metrology</u>: HCL, EDF, INRA, IRSN, IPSEN, CEA...
- <u>Uncertainty estimation</u> (tests, calibration, analyzes): IRSN, SAFRAN, Métropole de Lyon, INRA, AP-HP...
- Methods validation: Lactalis,
   AveyronLabo, HCL, IRSN, EDF,
   LyondellBasell, CH Avignon, CEA,
   IRFAQ...
- <u>Metrological equipements</u> <u>calibration:</u> Moteurs Baudouin, Commissariat des Armées, SCL, Ariane Space...

#### **Quality training:**

- Quality and internal audit according to ISO 17025, ISO 15189 and ISO 9001: TOTAL, CEA, IRSN, EDF, 13.56 Services, AP-HP...
- ISO 17025: 2017 and implementation of the Risks and Opportunities approach: IRSN, CEA, ICUBE, Laboratoires d'œnologie, ORANO...

#### **AUDIT - CONSULTING**

## Audits ISO 17025, ISO 15189, ISO 17043:

More than **100 audits** in the following areas:

- Chemicophysical and microbiological sampling and analysis of water, agrifood products, enology, human and radiological health,
- Equipment calibration (Temperature, balance, dimensional, masses, electricity, flow meter, volume)
- Organization of inter-laboratory comparisons (animal health, plants, radiological measurements, ...)

#### Consulting:

- Help with filing a COFRAC accreditation application
- Creation of method validation files
- Expertise on the estimation of measurement uncertainties
- Implementation of the process approach according to ISO 17025

## Outsourced management of key functions

Metrology Expert (since 2019) of the multisite medical biology laboratory of the hosîtal of Lyon (ISO 15189 accreditation)

#### SUPPORT

- Support for the implementation of ISO 17025 and ISO 15189: 13.56
   Services, IRSN, CEA, ICUBE, DEJEAN, CH Avignon, HCL, ORANO, HUPSSD, ED, CH Perpignan...
- Support for metrology management and estimation of uncertainties: HCL, IRSN, CEA...

#### OTHER MISSIONS

- Coordination of Porficiency Testings for CT2M (Temperature, Volume, Effectiveness of chemical disinfectants)
- Deputy Technical Manager of the CT2M calibration laboratory

#### Langues:

- English: reading, writting, speaking
- German: reading



#### Nathalie SUGLIANO

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Town: Marseille (France)



#### PROFESSIONAL EXPERIENCE



#### **EDUCATION**

French school in food industry – Option: QSE

#### FORMATIONS PROFESSIONNELLES

- Business development, prospecting and communication, 2017
- Presentation and interpretation of the requirements of ISO 17065, 2017
- Training on active pedagogy and digitalization in training (2020)

#### **TRAINING**

#### **Technical training:**

- <u>Metrology through practice</u>: EDF INRA, DGA, ...
- Estimation of uncertainties: IRSN, DGA, sigma béton, Larebron, Coca-cola ...
- Validation of quantitative methods: EDF, Colmarienne, laboratoires d'œnologie, ...
- Food industries metrology

#### **Quality training:**

- Quality and internal audit according to ISO 17025, ISO 14001, ISO 17020 and ISO 9001: IRSN, EDF, HCL, LDA, Orano, Aviation civile, Nexans, ...
- ISO 17025:2017 and implementation of the Risks and Opportunities approach: CNFPT, LDA (11, 21, 972), IRSN, ...
- Process approach: LDA, CEA

#### **AUDIT - CONSULTING**

#### ISO 17025, ISO 17043 audits:

More than **40 audits** in the following areas:

- Sampling and analyzes in chemicophysical, microbiological and radiological of water, agro-food / plant products, materials,
- Anthroporadiometry, Dosimetry, radiation protection,
- Asbestos, air quality / work environments
- Calibration (mass, balance, flow measurement,)

#### **Metrology audit:**

- Temperature, balance, mass, dimensionnal, volume, medical devices (centrifuge, thermocycler, ...)

#### Consulting

- Performing uncertainty calculations
- Validation of calculation files

## Outsourced management of key functions

Since 2019

Quality manager, in a laboratory that is accredited to ISO 17025 (SEVAR)

#### SUPPORT

 Support for the implementation of ISO 17025 and transition: SEVAR, EDF CNPE Golfech et TEGG, OENOLOGIE, ...

#### **OTHER MISSIONS**

- Quality assistant for the training / audit / consulting activity
- Coordination of Porficiency Testings for CT2M (electricity)

#### Language:

- English: reading, writting, speaking



#### Lise HEGRON

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Town: Tours (France)



#### PROFESSIONAL EXPERIENCE

2012 2014 2015 Research engineer Consultant Consultant PhD Communication manager, Quality assistant **CEA Cadarache** CT2M CT2M

#### **EDUCATION**

- French school in ceramics engineering
- PhD at the University of Aix-Marseille (France) in solid mechanics

#### PROFESSIONNAL TRAINING

- Qualification of internal auditor (2014)
- Training on active pedagogy and digitalization in training (2020)

#### TRAINING

#### **Technical training:**

- Metrology through practice: EDF (Chinon, Penly), INRA, DGA, ...
- Metrology awareness: AP-HP, ONERA, EDF, HCL
- Estimation of uncertainties (essais, étalonnage, analyses) : IRSN, DGA,

- Validation of quantitative methods: IRSN, ...
- Oral presentation at the French Metrology College

#### **Quality training:**

- Quality and internal audit according to ISO 17025, I'ISO 15189, I'ISO 17020 and ISO 9001: Medical analysis laboratories, IRSN, EDF, HCL, LDA, Orano, Civil aviation, AP-HP, LHL, Eurofins, SNEF, ...
- ISO 17025:2017 and implementation devices (centrifuge, thermocycler, ...) of the Risks and Opportunities approach: CNFPT, LDA (11, 21, 972), IRSN, ...
- Process approach: LDA 82, CEA

#### **AUDIT - CONSULTING**

#### ISO 17025, ISO 17043 audits:

More than 40 audits in the following areas:

- Sampling and analyzes in chemicophysical, microbiological and radiological of water, agro-food / plant products, materials,
- Anthroporadiometry, Dosimetry, radiation protection,
- Asbestos, air quality / work environments
- Calibration (mass, balance, flow measurement,)

#### ISO 17020 audits:

- Inspection in catering, health and radiation protection

#### **Metrology audit:**

- Temperature, balance, mass, dimensionnal, volume, medical

#### Consulting

- Performing uncertainty calculations
- Validation of calculation files

#### **Outsourced management** of key functions

**Since 2019** Quality manager, in a laboratory that is accredited to ISO 17025 (Naval Group)

Quality assistant, in a laboratory that is accredited to ISO 17025 and ISO 17043 (IRSN)

2018-2019

Quality manager, in a laboratory that is accredited to ISO 17025 (SEVAR)

#### SUPPORT

Support for the implementation of ISO 17025 and transition: IRSN, Naval Group, SEVAR, GREBE

#### **OTHER MISSIONS**

- Quality assistant for Proficiency Testing activity (ISO 17043)
- Coordination of Proficiency testing in mass calibration (3 PT since 2018)
- Management of the Label: « Label Fiabilité Mesures » (reliability in measurement)

#### Language:

- English: reading, writting, speaking
- German: reading



#### **Caroline QUIEVRYN**

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Town: Berre l'Etang (France)



#### **PROFESIONALEXPERIENCE**

Research engineer
PhD Student

Quality and Metrology Manager

Consultant

AIRTHEMIS laboratory
Air sampling in asbestos environments

CT2M

#### **EDUCATION**

- French engineering school in textiles (specialization in technical textiles and advanced materials)
- PhD Sudent in Montpellier University, specialization in chemistry and chemicophysical materials

#### PROFESIONAL TRANING

- Validation of methods (2019)
- Presentation an interpretation of ISO 17025 requirements (2018)

#### **TRAINING**

#### **Technical training:**

- Metrology introduction: CSIRO, EDF (CNPE Bugey), EDF, GCF, ARCELOR
- <u>Estimation of uncertainties</u> <u>introduction:</u> CSIRO, SOBEGI, EDF (CNPE Bugey), GCF
- Become a laboratory technical manager: ORANO, CEA, IRSN

#### **Quality training:**

- Risks and opportunities approach: CHR Lille, CRT Morlaix, ORANO,
- <u>ISO 17025 : 2017</u> : EDF, Laboratoires d'œnologie, A2M, TERANA, LVD11, DGA
- Become a laboratory quality manager: ORANO, EDF, ABDE, NEXANS, SCL, ARCANE, CRT Morlaix...

#### **AUDIT - CONSULTING**

#### **Audits:**

- Measure reliability label: IRSTEA
- Audit of support processes in CT2M

#### **Consulting:**

- Validation of spreadsheets (EDF)

#### Other missions

- Set up and validation of Excel tools (VBA)
- Preparation and participation in intern audits and COFRAC evaluations
- Set up and validation of calibration methods

## Outsourced management of key functions

**Since 2020** 

Metrology manager (support), in a laboratory that is accredited to ISO 17025 (EDF Blayais)

#### Support

- Support the ISO 17025 transition: ILL, laboratoire œnologique, LDV11, EDF (CNPE Tricastin), SOBEGI
- Support to metrology function management: EDF (Blayais)

#### Langages:

- English: reading, writting, speaking
- Japanese: Beginner



#### Mélanie VIDAL

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Town: Vitrolles (13)



#### PROFESSIONAL EXPERIENCE

2015	2018		2021		
Engineering Apprentices Dimensional metrology		System Engineer		Consultant	
Dedienne MultiPlasturgy		Innodura TB		CT2M	
Plasturgie automobile		Bench test creation		CTZIVI	

#### **EDUCATION**

- Technician Diploma IUT Physical Measurements of Le Mans
- National Engineering School of Le Mans (ENSIM), Vibration Acoustic and Sensor, specialty Metrology of measurement

#### **PROFESIONAL TRANING**

- Dimensional metrology (Mitutoyo, Metrolog X4)
- LabVIEW (Certification CLAD)

#### **TRAINING**

#### **Technical training:**

- Metrology introduction :

SGA, CIVC, formation inter-entreprises dans les locaux du CT2M

- Estimation of uncertainties introduction: SGA, CIVC

#### Langages:

English: Fluant reading, writting, speaking

Beginner Italian: reading, writting, speaking

#### **AUDIT - CONSULTING**

#### **AUDIT:**

Measure reliability label: **INRAE -B&PMP** 

#### Consulting:

Validation of spreadsheets:

Set up and validation of calibration methods:

Comité Nord Plans

#### **Outsourced management of** key functions

Quality Manager (support): in a laboratory that is accredited to ISO 17025

Naval Group Cherbourg

#### Other missions

- Validation of spreadsheets: EDF
- Set cup and validation of Excel tools (VBA)
- Set up and validation of calibration methods



#### 4 Your contacts

Technical contact for training activities: David BENHAMOU

Tel.: +33(0)4.90.50.90.14.

Mobile: +33(0)6.78.00.10.26.

Email: dbenhamou@ct2m.fr

Administrative contact: Manon CABEZAS / Anaïs LAMOUR

Tel.: 04.90.50.90.14.

Email: <a href="mailto:mcabezas@ct2m.fr">mcabezas@ct2m.fr</a> / <a href="mailto:alamour@ct2m.fr">alamour@ct2m.fr</a>

#### 5 Legal informations

Company: CENTRE TECHNOLOGIQUE MÉDITERRANÉEN DE MÉTROLOGIE (CT2M)

Adress: Centre des Creusets, Route de Lançon, 13250 Saint-Chamas, FRANCE

N° of SIRET: 391 762 663 000 14



#### 6 Our references

They regularly trust us ...













HOSPICES CIVILS DE LYON







**IRSN** 































