COMPANY PROFILE
2019

OUR SOLUTION IS YOUR SOLUTION
DATI AZIENDALI

Business name: LAB.INSTRUMENTS S.R.L.
Registered and operational office: Castellana Grotte SS 172 (Putignano-Alberobello) km. 28+200
Tel.: +39 080.4969749 - fax: +39 080.2121749 - E-mail: info@labinstruments.it - PEC: labinstruments@pec.it

Constitution date: 24 luglio 1984
Administrator: Dr. Cosimo Mario Stefanelli      MP: +39 3357168330    E-mail: m.stefanelli@labinstruments.it

Activity Codes:
• ATECOFIN 2004 n. 24.66.65 “Fabbricazione prodotti chimici per il consumo non industriale”.
• ATECO 20.59.50 “Produzione di standard puri e materiali di riferimento certificati (CRM) per il controllo ambientale e della sicurezza alimentare“.

Registration and qualifications:
• Research Institute of the Ministry of Education, University and Research (MIUR) registered from 2002 in the National Research Registry at no. 52833UTS.

Authorizations / Exercises Licenses:
  Resp. Dr.ssa Colucci Rossella.
  Resp. Dr. Cosimo Mario Stefanelli.
• License n.12432 for alcohols and sugar substances referred to in D.P.R. n.162 del 12.02.1965 e s.m. Ministero delle Finanze UTIF Resp.
• Code “PASSOE” of the AVCPass system of A.N.AC. (Autorità Nazionale Anti Corruzione (Legge114/2014).

Investments:
• Member of the Regional Agribusiness District(D.A.Re) scrl.
• Member of the Cooperative Credit Bank of CastellanaGrotte.

Share Capital: € 1.000.000.00 i.v.
Net assets: € 3.278.079,54 - Reserves for capital increase: € 215.700,08. (Data from balance sheet to 31.12.2018).
Welcome in Lab. Instruments srl
VISION

Protagonists in improving the quality of the environment and food safety

Become the competent and trusted partner of every organization that operates in the field of scientific research.
MISSION

Create innovative, economical and high quality products that facilitate scientific research activities.

Offer analytical solutions for the determination of micro-pollutant residues in food and the environment.
We are in Puglia, south-east of Bari, in the splendid Territory of the Trulli and the Grotte.

Far from any industrial emission or external source of pollution, in an area with a landscape constraint, we have created the first and only industrial factory in Italy for the “Production of pure standards and certified reference materials (CRM) for environmental control and food safety” (ATECO code 20.59.50).

We are between the Municipalities of Alberobello and Castellana Grotte, very close to Polignano a Mare, Ostuni and Martina Franca. Not far from Matera, Capital of Culture 2020, near the Adriatic sea which is only 12 Km away.

Easily accessible thanks to the two nearby airports of Bari Palese and Brindisi Casale.

Our industrial site has immediately obtained the ISO 14001 environmental certification.
.. who we are...

We are a group of chemists, CTF, pharmacists, biologists, ex-teachers, laboratory technicians, technical assistance specialists, instrumental analytical chemistry experts, with over a century of experience in the field of chemical analysis with techniques using analyte systems and high-tech scientific instruments.

Our particularity is to have rather rare skills, abilities and knowledges and in very specific sectors. Skills that we have made available to the company allowing us to create products with unique characteristics.

We are the forerunners of standards in solution and in mixture and the only accredited for their production.

Having grown up in Carlo Erba Spa, we have matured at Thermo Fisher Scientific Inc., one of the most prestigious multinationals in the industry. Also famous to television audiences because their equipment appears in Crime Scene Investigation. Since 2006 we have focused our energies on the LabStandard® project.

We are at the service of science and produce products for those who make science.
Registration in the Research Register of the MURST-MIUR since 2002 with the n. 52833UTS (recognition of the status of "Research Body"). Implementation and management of post-graduate Masters for young graduates in science subjects. 20 scholarships worth € 300,000.00 in PON projects funded by MURST-MIUR for € 660,000.00.

RESEARCH INSTITUTION OF MIUR

1984

FOUNDATION

While the Olympics were held in Los Angeles and Carl Lewis won his beautiful four gold medals, in the Apulian territory of the "Trulli and the Caves" the srl Lab.Instruments was established, whose partners were unaware that the latter would lead them to "run" faster than the famous champion.

2002

RESEARCH INSTITUTION OF MIUR

2006

RESEARCH AND DEVELOPMENT

Start of R&D activities of new Certified Reference Materials (CRM). Design and validation of "multi components" pesticide mixtures for the calibration of mass spectrometers.

Funded research projects:
- POR DEMETRA € 1.219.284 (2018-2020),
Achievement of ISO Guide 34

CERTIFIED QUALITY

2009
NEW LOCATION
Inauguration of the new laboratories in the presence of scientific personalities, political and religious authorities including the Minister for Regional Affairs. Presentation of the first kits containing up to more than 200 analytical pesticide standards for the analysis in GC-QqQ and LC-QqQ distributed in only 15 stable and homogeneous mixtures. Start of production activities of CRM & RM and Analytical Standards for environmental control and food safety.

2011

2015
INTERNATIONALIZATION
Start-up of company internationalization activities. Participation in international fairs (CHEM-MED2015 EXPO Italy - ANALYTICA 2016 and 2018 in Munich (Germany). Participation in Work shops and sector Conferences (MS FOOD DAY 2015 in Foggia (IT) and 2017 in Bologna (IT) - IMSC 2018 - IMSC 2018 in Florence (IT) EURL-NRL 2016 and 2018 in Almeria (Spain) EPRW 2018 in Munich (Germany) LARPW2019 Foz de Iguazu (Brazil) - NACRW2019 in Naples (Florida).
Management Team

50% of the management is made up of external partners and consultants. The other 50% is part of the work units.
We are an Innovative SME with over 40% of staff holding a master's degree in science subjects.
The structure of about 5,000 square meters has production laboratories, Quality Control laboratories, Research and Development Laboratories, large offices, warehouses, meeting room with attached necessary services including bar, canteen, parking areas, outbuildings for interns or visitors. The laboratories are equipped with high-tech scientific instruments, purchased also thanks to the contribution of € 656,800.00 (L.488 / 92) and of the Tax Credit (L.388 / 2000) on a total investment of € 2,362,000.00
... our production laboratories...

In these laboratories well over 2,000 Certified Reference Materials (CRM) and as many RM or Analytical Standards are produced under the LabStandard® brand. The main packaging consists of amber and silanized glass ampoules. Preservation takes place in refrigerated areas of over 10 thousand liters. Collective Protection Devices such as: clean rooms », glove boxes, hoods with absolute filtration and all kinds of PPE guarantee the safety of the operators and the quality of production.

Much of the production of LabStandard® is carried out in "clean rooms" conditioned at 20 °C.
We are by far the first RMP (Reference Materials Producer) to have employed (2010) Nuclear Magnetic Resonance ($^1$HqNMR) to give traceability and metrological traceability to purity and stability measurements of chemical standards. $^1$H-NMR spectroscopy can be considered a primary analysis technique which, unlike any other, does not need, as a reference standard, the same compound as the one to be analyzed. One of the characteristics of $^1$H-NMR spectroscopy is that the signal intensity is proportional to the number of hydrogens that generate the signal.

In this case, by relating the number of protons of one of our products to that of a primary standard of the National Institute of Science and Technology (USA) (Anal. Chem. 2015, 87, 6709-6717), we have been able to qualify and assign property values to hundreds of organic substances with a high degree of purity, mainly pesticides and metabolites, from which we produce CRM & RM or Analytical Standard with patented LabStandard® brand used in chemical laboratories around the world as they comply with ISO 17025: 2017 (§ 6.5)

LabStandard® is the registered trademark that identifies the Analytical Standards and the Certified Reference Materials (CRM) produced by Lab.Instruments® (Italy). The line consists mainly of standards of pesticides and native metabolites and the corresponding isotopically labeled with $^{13}$C, $^2$H, $^{15}$N, $^{18}$O, etc. To these have been added, and others are being added, standards and CRM of environmental micropollutants such as: IPA, PCBs, Phthalates, etc. and inorganics such as: Heavy Metals, cations and anions.

With the exclusive stable, homogeneous and CRM certified multi-component mixtures, we produce dozens of high-performance Explorer kits made up of hundreds of CRM standards distributed in a few mixes tested for stability and compatibility and necessary for instrumental calibration in multi-residue analysis in accredited laboratories and not.

Some "Explorer kits" have been created in collaboration with the most famous mass spectrometer manufacturers, we are of the "triple quadruple" type (GCQqQ or LCQqQ) or "Time of Fly" (ToF) or "Orbitrap ™" technology, for make the methods or Application Notes made by them immediately usable.

LabStandard® products are the solution to the difficulties of those who work in the control of food safety and quality.
.. the advantages of the LabStandard®...

LabStandard® products offer unquestionable technical, quality, safety and economic advantages, such as:

- less use of man / hours (at least 7x) for the preparation of «Working solutions»;
- greater safety for operators compared to the use of dangerous "neat" standards;
- lower risk of contamination of the areas of the laboratories where gravimetric measurements are performed;
- more frequent control of the “instrumental tune” and of the MRM transitions for the same hours / man committed;
- rapidly update the variation of Retention Times (Rt) and improve selectivity and sensitivity in MSMS;
- improve the efficiency of the measurements, reduce the frequency of calibrations, validate the analysis methods;
- calculate the recoveries of the "sampleprep", improve the precision reducing the uncertainty of the measurements;
- significant savings of money (3x) compared to the purchase of dangerous "neats" which are not yet marked CRM;
- drastic reduction in the consumption of special laboratory glassware (at least 10x) and of refrigerated spaces (7x);
- significant reduction in the consumption of ultrapure solvents and the related costs for disposal (at least 30x).

The LabStandard® products and the "Explorer kits" are the highest quality alternative to the expensive and dangerous "neat" standard.
...QuE-Lab® extraction and purification systems...

We produce the widest line of extraction systems based on the QuEChERS method (M. Anastassiedes, SJ Lehotay, D. Stajnbaher and FJ Schenken USA - 2003) for the Le extraction and for the clean-up (d-SPE) of pesticides, mycotoxins, acrylonitrile, etc. from food matrices.

QuEChERS is the acronym of Quick, Easy, Cheap, Effective, Rugged and Safe.

We produce LLe and dSPE systems for the US and Asian market, that is to say in compliance with A.O.A.C. 2007.01 and at the same time we realize all systems compliant with EN15662: 2018 intended for European users.

Our line of extraction and purification systems is completed with the SweEt (Swedish Ethyl Acetate Method) system introduced by Dr. Susan Ekroth of the Swedish National Food Agency.

QuE-Lab® products are packaged using an identifiable «Color Code» for caps, labels, boxes, etc.
We are the accredited Reference Material Producer to have already created the new CRM mixtures of polar pesticides (glyphosate, AMPA, glyphosate, etc.), native or marked with isotopes $^{13}$C, $^2$H, $^{15}$N, $^{18}$O, etc. used in the analysis of polar pesticides in foods of plant and animal origin, in accordance with the QuPPe-AO and QuPPE-PO methods of 2018 and 2019. The standards and CRMs created under accredited procedures and approved by a third-party accreditation body differ from the normal analytical standards because, on the label and on all the certificates, together with the RMP brand is the brand of the Accrediting Body.

We have presented a new product line for the calibration of the m/z ratios of all Thermo Fisher Scientific mass spectrometers such as: all the QqQs of the TSQ series, then HRMS Orbitrap™, Velos™, QExactive™, etc.

Together with other very few prestigious producers worldwide, we have been indicated by the EURL in the QuPPe 2019 European Official Methods as «Qualified Supplier» of CRM & RM of polar pesticides.

HRMS Orbitrap™, Velos™, QExactive™ are trademarks registered by Thermo Fisher Scientific Inc. USA.

We are always available to provide our courtesy service for the preparation of samples for «Proficiency Test» for Authorities.
FOOD Division: is completing the validation of CRM of polar metabolites and pesticides foreseen in the Official EURL Methods published in the first half of 2019 for analysis of residues in food of animal origin (QuPPE-AO) and of vegetable origin (QuPPE-PO). With the inclusion of isotopically labeled LabStandard® with $^{33}$C, $^2$H, $^{15}$N, $^{18}$O, of Phosphonic Acid-$^{18}$O$_3$, Glyphosate-$^{13}$C$_2^{15}$N, Chlorate-$^{18}$O$_3$, Ethephon-D$_4$, AMPA-$^{13}$C$^{15}$N, MPPA-D$_3$- Glufosinate-D$_3$, our proposal becomes the most complete on the market.

ENVIRONMENT Division: is finalizing the preparation of CRM and Analytical Standards for environmental analyzes. CRM and Analytical Standards of Polycyclic Aromatic Hydrocarbons (IPA), PCBs, Phthalates, Furans, Anions and Cations that we have successfully presented recently in Naples (USA) during the NACRW2019 receiving approval from prestigious exponents of laboratories such as: Food and Drug Administration (FDA), Environmental Protection Agency (EPA), Association of Official Agricultural Chemists (AOAC), United States Department of Agriculture (USDA).

The LabStandard® QuPPE catalog will be complete with all the pesticide and metabolite CRMs required by the Official 2019 Methods.
In the R&D laboratories we develop new CRM & RM and study new variants of the QuEChERS extraction and purification systems. We identify new Primary NIST Standards (SRM) that allow us to characterize, qualify and certify other «candidate» raw materials using 1HqNMR.

In the ISO 17025: 2017 accredited Quality Control laboratories we carry out homogeneity, stability and commutability tests on the products and their relative Orbitrap®, etc.

We are an Innovative SME that annually invests over 23% of its revenue in R&D activity.
Lab.Instruments was the first Italian company (2011) to obtain ISO Guide 34: 2009 accreditation “General requirements for the competence of reference material producers” with ISO / IEC 17025 accredited Quality Control laboratories where dozens of tests and checks are carried out using modern analysis techniques, such as: GC, HPLC, KF, NIR, NMR, CHNSO, FTIR, NIR, UV/VIS, AA, ICP-OES, ICPSMS, GCMSMS, LCMSMS, GCHRMS, LC-FTMS Orbitrap®, etc..

The instrumental equipment of the R&D and Q.C. laboratories and consists of scientific instruments such as:

- Agilent 1100 Autosampler DAD (n.2)
- TSP AS4000 P4000 FL3000 CQSw
- TSP AS4000 P4000 DAD CQSw(n.2)
- TSP AS4000 P4000 UV3000 CQSw (n.2)
- TSP AS4000 P2000 RI Shodex (n.2)
- Shimadzu LC10 UV RI
- Portlab LC Prep (n.2)RI Shodex
- Agilent LC 1100 / MSD Trap XCT Ultra
- Thermo Surveyor/ TSQ Quantum Ultra
- Thermo LC1100/ TSQ Discovery
- Thermo TSP4000/LCQ DUO MSn (n.2)
- Thermo Accela/ Exactive*
- Thermo Dionex / Q-Exactive*
- SW: eXcalibur,TraceFinder,Mass Hunter
- Thermo Trace ISQ-Triplus Excalibur
- Thermo Fisons MD800-AI3000(n.2)
- Thermo Mega 2/ Trio 1000 AI3000 (n.2)
- Finnigan Trace ZGC/Mat95XL* Triplus
- Thermo Trace GC 2000/GCQn
- Thermo GC Ultra/TSQ GC QqQ* Triplus
- Thermo Trace1300ITQ MSn AI3000
- Agilent 6850(II)-6890 CTC (n.2)
- Thermo GC Ultra Triplus FID(n.3)
- Fisons Mega AS800 FID/ECD (n.6)
- Fisons 8000 AS2000 NPD/FPD (n.3)
- Shimadzu GC 17A FID (n.3)
- Thermo Trace GC Ultra/Polaris QTriplus
- Bruker 400 Ultra Schield* SW ICON

We are in agreement with university laboratories and private accredited laboratories for special analyzes.
Following the recommendations of the International Laboratory Accreditation Cooperation (I.L.A.C.), we pursue the multiple accreditation by means of which we are able to guarantee, to the operators of the sector, the best quality and the highest level of product reliability. We are the first RMP in Europe to have obtained ISO 17025: 2005 / ISO Guide 34: 2009 accreditation (now ISO 17034: 2016) "General requirements for the competence of reference material producers" for the production and certification of Analitycal Standards and Certified Single Reference Materials (CRM) or in multi-component mixtures of veterinary drugs, mycotoxins, pesticides and metabolites, native or labeled with stable non-radioactive isotopes ($^{13}$C, $^{2}$H, $^{15}$N, $^{18}$O, etc.).

The purpose of accreditation is the "Production of certified reference materials" single component "and" multi-components "of pesticides and metabolites and other organic and inorganic compounds".

We are part of the NQI, an infrastructure metrological body in assessing the conformity of goods.
We work in close collaboration with the Universities, CNRs, and other Research Institutes present in our territory for R&D of new CRMs, synthesis of pesticides and isotopically labeled metabolites, stability studies of pesticides and innovative tools for improving food safety, etc. We actively participate in research projects such as:

We present Posters of our scientific works in National and International Congresses.
... the market in which we operate ...

The market served consists of: private laboratories that perform analysis of pesticide residues on behalf of fruit and vegetable producers and exporters or for large-scale retail trade (Coop, Conad, Selex, Auchan, CRAI, Despar, Metro, Interdis, etc.); public laboratories for the control of food safety and quality (IZS, ISS, Laboratories of the Chamber of Commerce, ARPA, APAT, Customs Lab, MAF, EPA, EURL, FDA, etc.), laboratories of the pharmaceutical industry that produce galenics, homeopathic medicines, nutraceutical products, etc. using plant extracts; research centers operating in the food and pharmaceutical fields (CRA, CNR, Universities, IRCCS, CEHIAM, etc.); QC laboratories within food companies that control incoming raw materials and products finished (Ferrero, Parmalat, Barilla, Unilever, Danone, Nestlé, Coca-Cola, Mars, General Mills, Mondelez, Pepsico, etc.; companies producing mass spectrometers (Thermo Fisher, Agilent, Sciex, Waters, Shimadzu, Bruker, Young Lin, Perkin Elmer, Leco, Mascom, Hitachi, etc.) who intend to accompany their supplies with standard multi-component mixtures to carry out QA / QC in mass spectrometers startup or to satisfy those customers who require the holistic finishing of GCMS or LCMS systems complete with materials and method for multi-residual pesticide analysis.
Positioning with respect to the main competitors considering: intrinsic quality of the products, certifications and accreditations, availability of innovative products, "Ready to use" kits.

The LabStandard® catalog for food analysis contains over 2000 of pesticides and metabolites CRM Standards.
the market for QuE-Lab® LLe and d-SPE and positioning ...

POSITIONING OF EXTRACTION SYSTEMS

Revenue growth by Product vs. Overall turnover.

Degree of attractiveness of the sector vs Degree of competitiveness of each product line

Positioning with respect to the main competitors considering: Quality of the products vs. Price

Positioning of the extraction systems s Product quality + Quality vs. service. Price + Terms of supply.

Each type of LLe or dSPE (Original, AOAC, EN15662, SwEAT) and in each packaging are available: in the QuE-Lab® Catalog
The internationalization strategy focuses heavily on participation in national and international thematic workshops to introduce our products and meet new operators in the sector. We participated in the Mass Food Day 2017 (Foggia) and 2018 (Bologna), the European Pesticide Residue Work Shop EPRW 2016 (Almeria-Spain), the EPRW 2018 (Munich), the Latin American Pesticides Residue WorkShop LAPRW2019 (Brazil) and the North American Contaminants Work Shop NACRW2019 (USA). We exhibit at Fairs such as Analytica 2016 and 2018 in Germany or at CHEMED (Milan).

Among our clients there are institutions and institutional bodies, public and private laboratories and primary food industries.
In 2019, thanks to the entry into force of the new ISO 17025: 2017, there is a strong growth in requests from new customers. Our LabStandard® and QuE-Lab® brand products also meet the needs of the QC Laboratories of the food industry (De Cecco, Monini, Ferrero, Conserve Italia, Nestlé, etc.) and some NGOs (GreenPeace, LegaAmbiente, etc.)
The LabStandard® products well meet the needs of the foreign market because these have already incorporated the novelties of the new ISO17025: 2017 standard according to which "the calibration of the laboratory instruments must necessarily be carried out using CRM produced by accredited RMP". Our LabStandard® catalog, produced in over 10 years of activity, is made up of over 2000 CRM & RM compounds, single or in mixtures, which meet the needs of customers.

In revenue 2018 exports account for 42% of the total with + 145% on 2017.

Current clients include International Authorities: EURL, FDA, EPA, AOAC, etc., mass spectrometer manufacturers such as: Thermo Fisher Scientific Inc., Bruker Gmbh, Waters, Perkin Elmer, etc
The national sales network, which is nearing completion, is made up of qualified and experienced salesmen well introduced in chemical laboratories that perform multi-residue analysis of pesticides. Exclusive agents and distributors are being identified in Europe, the USA and South America.

The company organization chart includes native speakers, appropriately trained, who daily (24/7), in different languages (Spanish, Portuguese, English, French, Russian) is in contact with foreign customers.
We have a website in six languages with a Direct Marketing platform that allows customers to acquire technical information on the product, stock availability, delivery times, price, etc.

- **Application Note**
- **Validation Method**
- **Video Tutorial**
- **Quick Search Products**
- **E-Commerce Platform**
- **Webinars on Demand & Webinars Library**
- **Certificates, Safety Data Sheets, Documentation and Product Info**

Lab Instruments is present on the main social networks.

In the download area of our website [www.labinstruments.org](http://www.labinstruments.org) you can download all the promotional material available.
Accreditations and Certifications
ISO 17034:2016
ISO/IEC 17025:2017
UNI EN ISO 14001:2015
UNI EN ISO 9001:2015

Produced by:
LAB INSTRUMENTS S.r.l. - High Pure Standards & Chemicals Division
Tel. +39 080 4969749 - Fax: +39 080 2121749
SS 172 (Putignano-Alberobello) km 28+200 - 70013 Castellana Grotte (BA)
Sito: www.labinstruments.it - E-mail: info@labinstruments.it

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Accreditations and Certiﬁcations
ISO 17034:2016
ISO/IEC 17025:2017
UNI EN ISO 14001:2015
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Tel. +39 080 4969749 - Fax: +39 080 2121749
SS 172 (Putignano-Alberobello) km 28+200 - 70013 Castellana Grotte (BA)
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Our solution is your solution