

# SAMPLE TEMPLATE - HARVEY W. WILEY AWARD NOMINATING FORM

TO: Chair, Harvey W. Wiley Award Committee AOAC INTERNATIONAL 2275 Research Boulevard, Suite 300 Rockville, Maryland 20850-3250

I hereby submit to you the following nomination for the Harvey W. Wiley Award.

1.	Name of Candidate:				
		(FIRST)	(MIDDLE)	(LAST)	
2.	Home Address:				
			(STREET ADD	RESS)	
		(CITY)	(STATE/PROVINCE)	(ZIP/POSTAL CODE)	(COUNTRY)
		(PHONE)	(FAX)	(E-MAIL)	
3.	Business Address:		(AGENCY OR	FIRM)	
			(STREET ADD	RESS)	
		(CITY)	(STATE/PROVINCE)	(ZIP/POSTAL CODE)	(COUNTRY)
		(PHONE)	(FAX)	(E-MAIL)	

- 4. Letter of Support: The nominee shall provide two (2) letters of recommendation of support from professional peers for this nomination, including one from the nominator.
- 5. **Present Position** (Brief description of job, duties, and responsibilities.):

#### For example

Dr. Anastassiades is the **Head of the EU Reference Laboratory for pesticides requiring Single Residue Methods (EURL-SRM).** He has been assuming this position **since 2006**, when the EURL-SRM was established.

His main duties, which are aligned with the EURL-SRM role and mission, include the following:

- Developing methods: The focus is on pesticides and metabolites that are not amenable or not easily
  amenable to multiresidue methods (SRM-compounds). The goal is to develop methods that can
  accommodate as many of these difficult compounds as possible, and that are attractive and fit-for
  purpose to be routinely used for regulatory controls (see publications).
- PLEASE PROVIDE BRIEF DESCRIPTION OF JOB, DUTIES AND RESPONSIBILITIES

6. Attach a copy of the nominee's current curriculum vitae reflecting education, professional career, membership and honors received. Attached additional sheets, if needed.

Please see nominee's curriculum vitae as an attachment below.

 Provide a concise description of the nominee's contribution to the development of analytical standards and or methods that support the regulation of materials used in agriculture, food or drug production, or that address safety and consumer protection.

Dr. Anastassiades' most important contribution is the development of the QuEChERS (Quick, Easy, Cheap, Effective, Rugged, and Safe) method that, without exaggeration, revolutionized pesticide residue analysis and affected many other areas (such as veterinary drug residue and various contaminant analyses), where QuEChERS-style methods replaced less effective procedures. The first QuEChERS publication in the Journal of AOAC Int. (Anastassiades *et al.*: Fast and Easy Multiresidue Method for the Determination of Pesticide Residues in Produce by Acetonitrile Extraction/Partitioning and Dispersive Solid-Phase Extraction; *J. AOAC Int.* 86 (2003) 412- 431) is the most widely cited and known publication in pesticide residue analysis. However, the QuEChERS method is certainly not the only contribution that Dr. Anastassiades made to the development of analytical methods and standards that support the regulations and address food safety.

<sup>&</sup>lt;sup>1</sup> https://www.eurl-pesticides.eu/userfiles/file/EurlALL/AgcGuidance SANTE 2019 12682.pdf

<sup>&</sup>lt;sup>2</sup> https://ec.europa.eu/food/system/files/2021-12/pesticides\_mrl\_guidelines\_wrkdoc\_12745.pdf

#### His achievements in these areas are truly enormous and include the following:

- a) **Development of QuEChERS method,** for the analysis of the vast majority of the pesticides (during his appointment at the USDA in the group of Dr. Lehotay), which led to the development of two important official methods for pesticide residue analysis: EN 15662 and AOAC 2007.01.
- b) **Introduction of dispersive SPE cleanup (dSPE) concept** in pesticide residue analysis to facilitate the removal of matrix components from the extract. This fast and low-cost clean-up concept is now being used in many other applications.
- c) **Introduction of analyte protectants (AP) concept** to compensate for matrix effects in GC analysis, thus improving quantitation accuracy.
- d) **Development of citrate-buffered QuEChERS method**, which became EN 15662 official method. Based on data collected from PTs, more than 80% of the pesticide labs in Europe employ this approach.
- e) **Development of QuPPe (Quick Polar Pesticides) method**, a simple method for the analysis of polar analytes not amenable to QuEChERS. This procedure, which was first introduced on the EURL-SRM website in 2009, has been gradually expanded and updated 18 times in the last 12 years and covers >50 analytes with one extraction and different LC-MS/MS methods.
- f) Development numerous QuEChERS variants for compounds not amenable to the normal QuEChERS approach (see the list of publications), this includes a method integrating an alkaline hydrolysis step to release acidic pesticides that are originally present as esters or conjugates. This method replaced labor-intensive, derivatization-based methods that were previously used for this important group of pesticides.
- g) **Development of QuOil-method** method for the analysis of pesticides in oils and high-fat content products, which were not amenable to the QuEChERS procedure.
- h) Development of QuMFu (Quick method for fumigants) for the analysis of fumigants in dry food.
- i) Synthesis of selected isotope labelled internal standards, which were not commercially available at that time (Chlorate, Perchlorate, Phosphonate, Diquat), and their distribution to labs around the world. Interaction with chemical companies to encourage them to include certain isotope labelled compounds in their portfolio to facilitate analysis by labs (mainly QuPPe compounds but also other compounds).
- j) **Implementation of pesticides-online platform** (introduced in 2002) designed to integrate in one platform information of interest to pesticide residue analysts (www.pesticides-online.eu). This opened the way to gain added value by interlinking and data mining information. Eventually, pesticides-online was trimmed to only contain the residue data with all other areas migrating to the interconnected EURL-DataPool.

#### 8. Describe how the contribution has been used by regulatory agencies or the analytical community in

#### support of safety or consumer protection and its impact.

Dr. Anastassiades has been very influential within the global pesticide residue analysis and also broader chemical residue and contaminants community, where basically everyone knows and benefited from the QuEChERS methodology. The QuEChERS method represents his most important contribution with an immense impact on the development of analytical methods in the recent years. However, as highlighted above, Dr. Anastassiades has contributed and keeps contributing many more methods and ideas that have transformed the field and keep shaping it thanks to his clear vision and enormous personal dedication to help and support other analytical chemists and laboratories.

His analytical methods are widely used by many labs around the world. Judging from method information submitted during the EU proficiency tests, more than 80% of laboratories within the EU, both in the regulatory and private sector, employ the QuEChERS method (citrate buffered). Various QuEChERS variations published in the EURL-website are widely used and in some cases virtually all PT participating laboratories reported using them. Same applies to the QuPPe method, where between 50 and 90% of the labs (depending on the compound) employ this approach.

Dr. Anastassiades' publications were cited in more than 6000 papers according to Research Gate and this is despite the fact that many of his contributions have been published as open-source documents within the EURL-SRM website.

More than 7000 experts from around the world are registered as users of the databases run by the EURL-SRM that Dr. Anastassiades is heading since 2006. As the Head of the EURL-SRM, he is very frequently consulted by EU bodies when it comes to various aspects of analytical relevance, such as setting of residue definitions and MRLs or drafting guidelines.

9. List of publications that support the contribution. Kindly highlight the publications that support your contributions.

## **Publications in Journals and Books**

(NOTE: This listing does not include posters, oral presentations and abstracts thereof):

1.	PhD Thesis:  Development of Fast Methods for the Residue Analysis of Pesticides in Fruits and Vegetables using SFE – a Contribution to Reduce Analytical Deficits, Shaker Verlag Aachen (2001) ISBN: 3-8265-9618-8 (in German)
2.	Book Chapter:  Sample Handling and Clean-up Procedures II- New Developments; Chromatographic-Mass Spectrometric Food Analysis for Trace Determination of Pesticide Residues, Editor Amadeo R. Fernández-Alba, Volume XLIII of "Comprehensive Analytical Chemistry" Editor D. Barceló, Elsevier B.V. Amsterdam (2005) 113-233, ISBN:0-44450943-7
3.	Book Chapter: Recent Developments in QuEChERS Methodology for Pesticide Multiresidue Analysis; Pesticide Chemistry, Editors Ohkawa, Miyagawa, Lee (Eds.), WILEY-VCH Verlag GmbH Co. KGaA, Weinheim (2007) 439-458, ISBN: 978-3-527-31663-2
4.	Book Chapter:  Modern Sample Preparation Methods for Pesticide Multiresidue Analysis; Élelmiszerbiztonság megítélési módszerei II: Editors  Ambrus Árpád: Edison House Holding Zrt. Budapest (2010) 717-734, ISBN: 978-963-88947-1-7
	PUBLICATIONS IN JOURNALS
5.	Determination of Phenoxyalkanoic Acid Herbicides in Plant Extracts after Derivatisation with 2,2,2-Trichloroethanol; Deutsche Lebensmittelrundschau (DLR) <u>92</u> (1996) 175-183 (in German)
6.	Multiresidue Method for the Determination of Pesticide Residues in Citrus Fruits by GC-MSD - <u>Part 1</u> : "Theory and Method Development; Deutsche Lebensmittelrundschau <u>93</u> (1997) 316-327 (in German)
7.	Multiresidue Method for the Determination of Pesticide Residues in Citrus Fruits by GC-MSD - Part 2: "Analysis of Samples from the Market; Deutsche Lebensmittelrundschau <u>93</u> (1997) 393-396 (in German)
8.	Multiresidue Method for the Determination of Pesticide Residues in Citrus Fruits by GC-MSD - Part 3: "Determination of 2,4-D after alkaline treatment; Deutsche Lebensmittelrundschau <u>94</u> (1998) 45-49 (in German)
9.	Multiresidue Method for the Determination of Pesticide Residues in Citrus Fruits by GC-MSD - Part 4: "Analysis of Organotin Compounds; Deutsche Lebensmittelrundschau (DLR) <u>96</u> (2000) 466-477 (in German)
10.	Analysis of Carbendazim/Benomyl, Thiophanate Methyl and 2,4-D in Fruits and Vegetables after Supercritical Fluid Extraction; Journal of Chromatography-A 825 (1998) 45-54
11.	Comparison of ASE with Traditional Extraction Methods Chemie in Labor und Biotechnik 50 (1999) 4-6 (in German)
12.	Analysis of Benzoyl-Phenyl-Urea Pesticides in Fruits and Vegetables – Methodology and Residue Data; Deutsche Lebensmittelrundschau (DLR) <u>97</u> (2001) 176-190
13.	Development, validation, and application of an acetylcholinesterase-biosensor test for the direct detection of insecticide residues in infant food; <i>Biosensors &amp; Bioelectronics</i> <u>17</u> (2002) 1095-1105
14.	Determination of pesticide residues in nonfatty foods by supercritical fluid extraction and gas chromatography/mass spectrometry: collaborative study; <i>J. AOAC Int.</i> 85 (2002) 1148-66;
15.	Simultaneous Determination of Neonicotinoid Insecticides in Fruits and Vegetables by LC/MS and LC/MS-MS – Methodology and Residue Data; Deutsche Lebensmittelrundschau (DLR) <u>99</u> (2003) 188-196
16.	Quick, Easy, Cheap, Effective, Rugged, and Safe (QuEChERS) approach for the determination of pesticide residues; WTQA 2002 – 18th Annual Waste Testing & Quality Assurance Symposium; "Sound Science Through Effective Project Planning."; Jan (2003)
17.	Fast and Easy Multiresidue Method for the Determination of Pesticide Residues in Produce by Acetonitrile Extraction/Partitioning and Dispersive Solid-Phase Extraction; <i>J. AOAC Int.</i> 86 (2003) 412-431
18.	<b>Evaluation of Analyte Protectants to Improve Gas Chromatographic Analysis of Pesticides</b> ; <i>Journal of Chromatography-A</i> <u>1015</u> (2003) 163-184
19.	Analysis of Pesticide Residues; Chemie in Unserer Zeit <u>37</u> (2003) 324-335
20.	Simultaneous Determination of Macrocyclic Lactone Insecticides in Fruits and Vegetables using LC/MS-MS – Methodology and Residue Data; Deutsche Lebensmittelrundschau (DLR) 100 (2004) 140-150
21.	Combination of Analyte Protectants to Overcome Matrix Effects in Routine GC Analysis of Pesticide Residues in Food Matrices; Anal. Chem. 77 (2005) 8129-8137

22.	Comparison of SIM and MRM for the Quantitative Confirmation of Pesticide Residues in Food; Application Note, Waters Corporation, Manchester, 2006			
23.	Pestizide und Probenvorbereitung; Laborpraxis, April (2006) 28-29			
24.	Pesticide Residues in Strawberries Sampled from the Market of the Federal State of Baden Württemberg between 2002 and 2005; Journal für Verbraucherschutz und Lebensmittelsicherheit 2 (2006)			
25.	Analysis of pesticide residues using the Quick Easy Cheap Effective Rugged and Safe (QuEChERS) pesticide multiresidue method in combination with gas and liquid chromatography and tandem mass spectrometric detection; <i>Anal Bioanal Chem. 389(6): Nov</i> (2007); 1697-714			
26.	The Guar Gum Case: Contamination with PCP and Dioxins and Analytical Problems; Conference Papers: 28th International Symposium on Halogenated Persistent Organic Pollutants; Birmingham, UK - Volume: 7 Aug (2008)			
27.	Efficiency evaluation of the main multiresidue methods used in Europe for the analysis of amitraz and its major metabolites; <i>J AOAC Int. 93(2); Mar-Apr (2010); 380-8</i>			
28.	Development and independent laboratory validation of a simple method for the determination of paraquat and diquat in potato, cereals and pulses; Anal Bioanal Chem. 404(8); Nov (2012); 2465-74			
29.	Análisis multiresiduo de 41 pesticidas en miel por LC-MS/MS: evaluación de dos métodos de clean-up: Agrociencia Uruguay 17(1): (2013); 101-107			
30.	QuEChERS-Based Method for the Multiresidue Analysis of Pesticides in Beeswax by LC-MS/MS and GC×GC-TOF; J Agric Food Chem; 30;62(17); Apr. (2014); 3675-83			
31.	Studies to improve the extraction yields of incurred pesticide residues from crops using the QuEChERS method; J AOAC Int. 98(2): Mar-Apr (2015);450-63			
32.	Analysis of "Amitraz (sum)" in pears with incurred residues - Comparison of the approach covering the individual metabolites via LC-MS/MS with the approach involving cleavage to 2,4-dimethylaniline; Food Chem. 1;166; Jan (2015); 240-247			
33.	Identification in residue analysis based on liquid chromatography with tandem mass spectrometry: Experimental evidence to update performance criteria; Anal Chim Acta. 11; May (2015) 873:1-13			
34.	Development of a QuEChERS-Based Method for the Simultaneous Determination of Acidic Pesticides, Their Esters, and Conjugates Following Alkaline Hydrolysis; J Agric Food Chem. 65(6); Feb 15 (2017); 1296-1305			
35.	Testing the Accuracy of Analytical Standard Solutions Used for Quantitative Determination of Pesticide Residues; J AOAC Int. (2017) Jul 1; 100(4):1058-1061			
36.	Compensation for matrix effects in GC analysis of pesticides by using cucumber extract; Anal Bioanal Chem. 410(22): Sep (2018); 5481-5489			
37.	Chemicals Rather than Bacteria? - Neither is Permitted in the EU - Residues of Fumigations with Ethylene Oxide in Sesame Seeds; Lebensmittelchemie · Vol 75(S1) -March (2021)			
38.	Development and validation of an analytical method for the multiresidue analysis of pesticides in sesame seeds using liquid- and gas chromatography with tandem mass spectrometry; <i>J Chromatogr. A.</i> (2021) Aug 30; 1652:462346.			
	PUBLICATION OF INTERVIEWS			
39.	QuEChERS, a sample preparation technique that is "catching on": An up-to-date interview with the inventors; LCGC North America, Vol 28, Number 7, July (2010)			
40.	The QuEChERS Revolution; LCGC Europe 23(9), September (2010), Volume 23, Issue 8; Pages. 418–429 also published in LCGC Asia Pacific-11-01-2010, Volume 13, Issue 4; Pages: 30–36			
41.	Food-Lab Interview mit Dr. Michelangelo Anastassiades; Food-Lab 04-2019, pages 16-26			
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### **Publications on the EURL-SRM Website**

(NOTE: this listing mainly focuses on analytical procedures, EUPT reports and other documents are not included)

(NC	TE: this listing mainly focuses on analytical procedures, EUPT reports and other documents are not included)
1.	Quick Method for the Analysis of Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC- or IC-
	MS/MS Measurement I. Food of Plant Origin
	(QuPPe-PO-Method) (V1-2009 V12-2021)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm_meth_QuPPe_PO_V12.pdf
2.	Quick Method for the Analysis of Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC- or IC-
۷.	MS/MS Measurement II. Food of Animal Origin
	(QuPPe-AO-Method) (V1-2012V3.2 20219)
_	https://www.eurl-pesticides.eu/userfiles/file/meth QuPPe AO V3 2.pdf
3.	Analysis of Toxicologically Critical SRM Compounds in Infant Formulae and Milk - Part 1: Analytical Aspects (V1-2020; V2-2021)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/SRM_substances-in-infant-formula_extraction-and-instrument-
	methods V2.pdf
4.	Analysis of Toxicologically Critical Pesticides and some Additional SRM Compounds in Infant Formulae and Milk - Part 2:
	Residue findings (V1-2021) <a href="https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EURL_Observation_SRM_substances-in-infant-">https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EURL_Observation_SRM_substances-in-infant-</a>
	formula_residue_findings_V1.pdf
5.	Analysis of Acidic Pesticides using QuEChERS (EN 15662) and acidified QuEChERS method Reported by (V1 2015)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observations AcidicPesticides.pdf
6.	Analysis of Pesticides Entailing Conjugates or Esters in their Residue Definitions (V1-2020, V2-2021) https://www.eurl-
	pesticides.eu/userfiles/file/EurlSRM/EURL-SRM Anal Observ Report hydrol of Esters&Conj of Pesticides V2.pdf
7.	Analysis of 4-Amino-3-methylbenzoic acid in eggs - The main metabolite of amitraz in products of animal origin (V1-2019)
	https://www.eurl-pesticides.eu/library/docs/srm/EURL Observation%203-Amino-meta%20toluic%20acid.pdf
8.	Analysis of various relevant pesticide metabolites of in products of animal origin by the QuEChERS Method using LC-MS/MS
0.	(V1-2018) https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observation QuEChERS-AO V1.pdf
0	Analysis of the Tritosulfuron Metabolite AMTT by QuEChERS Method using LC-MS/MS (V1-2017)
9.	
40	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm_Observation_AMTT.pdf
10.	Quantification of Residues of Folpet and Captan in QuEChERS Extracts (V1-2008; V2-2010; V3.1-2017)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/meth_CaptanFolpet_EurlSRM.pdf
11.	Analysis of Captan, Folpet and their respective metabolites Phthalimide and Tetrahydrophthalimide via LC-MS/MS either
	directly or following hydrolysis (V1-2019)
	https://www.eurl-pesticides.eu/library/docs/srm/EurlSrm Observation Captan Folpet LC-V1.pdf
12.	Analysis of Carbofuran (sum) by applying hydrolysis on QuEChERS extracts (V1-2016)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm_Observations_Carbofuran.pdf
13.	Analysis of dicofol via QuECHERS - use of isotope labeled dicofol to improve precision (V1-2013)
	https://www.eurl-pesticides.eu/library/docs/srm/EurlSrm_Observations_dicofol.pdf
14.	Analysis of Dimethoate and Omethoate Metabolites - Method Development and Pilot Monitoring (V1-2019)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observation Dimethoate Omethoate V1.pdf
15.	Analysis of Dithianon by the QuEChERS Method - Impact of pH on recovery rates (V1-2014; V2.1-2016)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/observ_Dithianon-EurlSRM.pdf
16.	Analysis of Dodine by the QuEChERS Method - Interactions in the injector and role of matrix (V1-2015)
10.	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observations Dodine.pdf
17.	Improvement of Ethoxyquin Recoveries by QuEChERS Through the Addition of Ascorbic Acid (V1-2014; V2-2015)
1/.	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observations Ethoxyquin V2.pdf
10	
18.	Analysis of Ethoxyquin and its Metabolites in Fish Using the QuEChERS Method (V1-2016)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/observ_Ethoxyquin-metabolites-salmon_EurlSRM.pdf
19.	Analysis of Ethylene Oxide and its Metabolite 2-Chloroethanol by the QuOil or the QuEChERS Method and GC-MS/MS (V1-2020)
	https://www.eurl-pesticides.eu/library/docs/srm/EurlSrm_Observation_EO_V1.pdf
20.	Analysis of Guazatine in Food Products (V1-2018)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observation Guazatine V1.pdf
21.	Analysis of Organotin-Pesticides by the QuEChERS Method - Impact of acidifying on the recoveries (V1-2013)
	https://www.eurl-pesticides.eu/library/docs/srm/EURL observations Organotins.pdf
22.	Determination of Prochloraz (sum) via its Metabolites (V1-2014, V3-2016)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EURL observations Prochloraz.pdf
23.	Matrix-induced Signal Enhancement of Propamocarb in LC-MS/MS (V1-2012)
	https://www.eurl-pesticides.eu/library/docs/srm/EurlSrm Observations Propamocarb.pdf
24.	Analysis of Pymetrozine by the QuEChERS Method - Impact of pH on Recovery Rate (V1-2016)
۷٦٠.	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observations Pymetrozine.pdf
25.	Analysis of Pyridate and its metabolite Pyridafol by QuEChERS and LC-MS/MS (V1-2015);
23.	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EURL Observations Pyridate.pdf
	https://www.currpesticides.ed/disermes/mic/Editionity/E

26.	Analysis of the Fumigant Sulfuryl Fluoride Applying Headspace-GC-MSD (V1-2018) https://www.eurl-
	pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observation Sulfuryl fluoride V1.pdf
27.	Use of Analyte Protectants in GC-Analysis - A way to improve peak shape and reduce decomposition of susceptible compounds
	(V1-2013) <a href="https://www.eurl-pesticides.eu/library/docs/srm/EURL">https://www.eurl-pesticides.eu/library/docs/srm/EURL</a> Observation-APs.pdf
28.	Errors due to losses of the Internal Standard BNPU (Nicarbazin) during dSPE cleanup of QuEChERS extracts with GCB or of QuOil
	extracts with PSA (V1-2016); https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observations BNPU-V1.pdf
29.	Analysis of Abamectin via QuEChERS and LC-MS/MS (V1-2008)
	https://www.eurl-pesticides.eu/library/docs/srm/meth_Abamectin_CrlSrm.PDF
30.	Analysis of Phenoxyalkanoic Acids in Milk using QuEChERS method and LC-MS/MS (V2-2014)
	https://www.eurl-pesticides.eu/userfiles/file//EurlSrm_meth_Phenoxy_Milk(1).pdf
31.	Analysis of Acidic Pesticides in Wheat Flour Samples by LC-MS(/MS) using the QuEChERS Method (incl. optional alkaline
-	hydrolysis to release covalently bound compounds) (V1-2007) https://www.eurl-
	pesticides.eu/library/docs/srm/meth acidicpesticides wheat quechers EurlSrm.pdf
32.	Analysis of Amitraz and its Main Metabolite in Pears via QuEChERS and LC-MS/MS (V1-2007);
32.	https://www.eurl-pesticides.eu/library/docs/srm/meth Amitraz CrlSrm.pdf
33.	EURL-SRM - Analytical Method Report Analysis of Residues of Carbofuran (sum) Using QuEChERS Method (V1-2016)
33.	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm meth CarbofuranQuechers.pdf
24	
34.	Analysis of Bifenazate (sum) by the QuEChERS Method using LC-MS/MS (V1-2017)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/meth_Bifenazate_EurlSRM.pdf
35.	Bromine Containing Fumigants Determined as Total Inorganic Bromide (V1-2007, update 2008)
	https://www.eurl-pesticides.eu/library/docs/srm/meth_TotInorgBromide_CrlSrm.pdf
36.	Analysis of Chlormequat and Mepiquat Residues in Foods of Plant Origin (V1-2008; V2-2009)
	https://www.eurl-pesticides.eu/library/docs/srm/meth ChlormequatMepiquat CrlSrm.pdf
37.	Modified QuEChERS-Method for the Analysis of Chlorothalonil in Fruits and Vegetables (V1-2010)
	https://www.eurl-pesticides.eu/library/docs/srm/meth_QuEChERSforChlorothalonil_2010.pdf
38.	Analysis of 4-Hydroxy-Chlorothalonil (SDS-3701) in Milk using QuEChERS and LC-MS/MS (V1-2014; V2-2014)
	https://www.eurl-pesticides.eu/userfiles/file//EurlSrm_meth_4HydroxyChlorothalonil_Milk-V2-1.pdf
39.	Analysis of Lambda- and Gamma-Cyhalothrin involving QuEChERS Extraction and Enantioselective LC-Separation of RS and SR-
	Isomers (V1-2019) https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm Observation Cyhalothrin V1.pdf
40.	Analysis of Dithianon in Food of Plant Origin using acidified QuEChERS and LC-MS/MS (V1-2014; V2-2016)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/meth_Dithianon_EurlSRM.pdf
41.	Analysis of Dithiocarbamate Residues in Foods of Plant Origin involving Cleavage into Carbon Disulfide, Partitioning into
	Isooctane and Determinative Analysis by GC-ECD (V1-2008; V2-2009)
	https://www.eurl-pesticides.eu/library/docs/srm/meth_DithiocarbamatesCs2_EurlSrm.pdf
42.	Analysis of Flonicamid-Metabolites TFNA and TFNG using acidified QuEChERS method (V1-2014; V2-2015)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSRM meth FlonicamidMetabolites.pdf
43.	Analysis of Nicotine in Mushrooms (V1-2009)
75.	https://www.eurl-pesticides.eu/library/docs/srm/meth NicotineMushrooms CrlFvCrlSrm.pdf
44.	Analysis of Quaternary Ammonium Compounds (QACs) in Fruits and Vegetables using QuEChERS and LC-MS/MS (V1-2012; V5-
44.	
15	2016); https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSRM_meth_QAC_ShortMethod.pdf
45.	Analysis of BACs and DDAC in Milk using QuEChERS method and LC-MS/MS (V2-2014)
4.0	https://www.eurl-pesticides.eu/userfiles/file//EurlSRM_meth_QAC_Milk.pdf
46.	Modified Version of the QuEChERS-Method for the Analysis of Pentachlorophenol in Guar Gum (V1-2007)
<u> </u>	https://www.eurl-pesticides.eu/library/docs/srm/meth_QuechersForGuarGum.pdf
47.	Analysis of the Fumigant Phosphine Applying Headspace-GC-MSD (V1-2014)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSRM_meth_Phosphin.pdf
48.	Residues of DFA and TFA in Samples of Plant Origin (V1 2017)
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm residue-Observation TFA-DFA.pdf
49.	Residue Findings of QuPPe-Compounds in Samples of Plant Origin from the German Market in 2018 (V1 2019),
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm_residue_findings_QuPPe-Compounds.pdf
50.	Residue Findings of QuPPe-Compounds in Samples of Plant Origin from the German Market in 2019;
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm residue findings QuPPe-Compounds2019.pdf
51.	Residue Findings of QuPPe-Compounds in Samples of Plant Origin from the German Market in 2020;
	https://www.eurl-pesticides.eu/userfiles/file/EurlSRM/EurlSrm residue findings QuPPe-Compounds2020.pdf
	Publications in the web-journal of the CVUA Stuttgart
52.	Analysis of Perchlorate in Food Samples of Plant Origin Applying the QuPPe-Method and LC-MS/MS;
	Aspects of Food Control and Animal Health   02 2013 (cvuas.de)
53.	Analysis of Phosphine in Dried Foodstuffs via Headspace-GC-MSD –
55.	Aspects of Food Control and Animal Health   02 2014 (cvuas.de)
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54.	Analysis of Fumigants in Cereals and Dried Fruit: Part I via GC-MS/MS –
	Aspects of Food Control and Animal Health   01 2015 (cvuas.de)
55.	Improvement of Ethoxyquin Yields and Recoveries from Pears through the Addition of Ascorbic Acid –
	Aspects of Food Control and Animal Health   01 2017 (cvuas.de)
56.	Determination of Triazole Derivative Metabolites (TDMs) in Fruit and Vegetables using the QuPPe Method and Differential
	Mobility Spectrometry (DMS) and Survey of the Residue Situation in Organic and Conventional Produce –
	Aspects of Food Control and Animal Health   02 2016 (cvuas.de)
	Publication on the website of the CVUA Stuttgart
57.	Validation of a Simple and Rapid Multiresidue Method (QuEChERS) and its Implementation in Routine Pesticide Analysis (2003)
58.	Lieber "Kemie" statt Keime? – In der EU ist beides nicht zulässig; Teil 1: Begasungsmittel Ethylenoxid in Sesam;
	CVUA Stuttgart   Lieber "Kemie" statt Keim (ua-bw.de), Oct. 2010
59.	Lieber "Kemie" statt Keime? – In der EU ist beides nicht zulässig; Teil 2: Pflanzenpulver und Nahrungsergänzungsmittel
	CVUA Stuttgart   Lieber "Kemie" statt Keim (ua-bw.de). Jul 2021
60.	Lieber "Kemie" statt Keime? – In der EU ist beides nicht zulässig; Teil 3: Instant-Nudelgerichte – asiatisch, auch mit Ethylenoxid
	begast! CVUA Stuttgart   Lieber "Kemie" statt Keim (ua-bw.de) : Aug 2021

# 10. Other recognitions or awards received that support the significance of the contribution.

	Bruno Rossmann Award for 'Development a Fast Method for the Deter-mination of
08/1999	Carbendazim, Benomyl und Thiophanate-Methyl as a Sum and 2,4-D in Fruits and Vegetables
08/1333	Involving Extraction with Supercritical CO2' by the German Chemical Society (GDCh) during the
	German Food Chemistry Congress in Hamburg
	<b>Poster-Award</b> at the 4 <sup>th</sup> European Pesticide Residue Workshop in Rome/Italy, title of poster:
06/2002	'Reduction of Analyte Degradation and Peak Tailing During GC Injection by Addition of Protecting
	Agents' (shared)
08/2009	ARS Outstanding Efforts in Technology Transfer Award by American Agricultural Research
08/2009	Service ARS) for developing the QuEChERS approach to monitor pesticides and other foods
	<b>DIN-Preis Nutzen der Normung 2009</b> = DIN-Award for the usefulness of a standard for saving
	effects by using the EN-15662 (QuEChERS) (DIN= German Institute for Standardization) approach
	<b>Poster-Award</b> at the 9 <sup>th</sup> European Pesticide Residue Workshop in Vienna, title of poster: Analysis
06/2012	of Amitraz (sum) from QuEChERS Extracts – comparison of the method involving analysis of
06/2012 11/2009	individual MRM-Amenable metabolites (DMF, DMPF and DMA) with a method involving cleavage
	to DMA (shared)
06/2014	<b>Poster-Award</b> at the 10 <sup>th</sup> European Pesticide Residue Workshop in Vienna, title of poster:
06/2014	Analysis of Fumigants in Cereals and Dry Fruit Applying GC MS/MS (shared)
	Poster-Award at the 13 <sup>th</sup> IUPAC Congress, San Francisco 2014, title QuEChERS-LC-MS/MS and
08/2014	GCxGC-TOF adaptability for the analysis of beehive products seeking the development of
	agroecosystems sustainability monitor (shared)
	NACRW Excellence Award for Sample Preparation relevant to Chemical Residue Analysis for the
07/2015	development, validation and implementation of the Quick, Easy, Cheap, Effective, Rugged and
07/2015	Safe (QuEChERS) as a sample preparation procedure for the analysis of pesticides and other
	chemical contaminants in food and agricultural matrices"; at the 52 <sup>nd</sup> North American Chemical

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CURRICULUM VITAE	CURRICULUM VITAE Dr. Michelangelo Anastassiades		
	Date of Birth: Nationalities: Profession: Phone:		
	E-mail:		
Education	1975 - 1986	School career in Nicosia (Cyprus)	
	1988 - 1994	Studies in Food Chemistry (University of Stuttgart)	
	05/1994	State Examination for Food Chemists - Part A	
	1994 - 1995	'Practical Year' at CVUA Stuttgart	
	10/1995	State Examination for Food Chemists - Part B	
	1996 - 2000	<b>Doctoral Thesis</b> at University of Hohenheim (Supervisor: Prof. Dr. W. Schwack); Topic: 'Development of Fast Methods for the Analysis of Pesticide Residues in Food employing Supercritical Fluid Extraction - a Contribution for the Reduction of Analytical Deficits in Pesticide Residue Analysis' ( <i>Defence of Doctoral Thesis: 05/2001</i> )	
Professional Experience 1995 - 2000		<b>Food chemist</b> at the Pesticide Residues Lab of CVUA Stuttgart. (Research on pesticide residue analysis by SFE)	
	2000 - 2002	<b>Visiting scientist</b> at the USDA in Wyndmoor Pennsylvania, USA (Development of QuEChERS method and analyte protectants concept)	
	2003 - present	Food Chemist at the Pesticide Residues Lab of CVUA Stuttgart	
Since July 2006		Head of EU Reference Laboratory for Pesticide Residues requiring Single Residue Methods (EURL-SRM); (Method development, technical assistance to DG-SANCO and EFSA; Organization of PTs, workshops, trainings).	
Participation in Organizations, Working Groups and Panels	<ul> <li>DIN/CEN Pesticide Working Group (German Standardization Bodies),</li> <li>CEN Pesticide Working Group (European Standardization Bodies),</li> <li>§64 LFGB, WG Pesticides (German body for official food testing methods)</li> <li>MGPR (Mediterranean Group of Pesticide Research, founding member)</li> <li>EU-EURL/NRL-Network (coordinating function)</li> <li>GDCh Pesticide Working Group (belonging to German Chemical Society),</li> <li>EPRA (Pesticide WG of German federal states)</li> <li>EUPT-Scientific Committee (Evaluating EU Proficiency Tests on Pesticides),</li> <li>AQC-Scientific Committee (Drafting EU-official Validation and Quality Control Procedures for pesticide residue analysis in food on behalf of DG-SANTE),</li> <li>EFSA NETWORK ON PESTICIDE MONITORING</li> <li>AOAC working group on chlorate/perchlorate</li> </ul>		

Current Duties	- Coord - Meth - Deve - Cond - Orga - Tech	of EU Reference Laboratory (EURL-SRM) (since mid. 2006) dinating the Network of National Reference Laboratories (NRLs) od development and validation lopment of Pesticide-Related Databases uction of workshops and training courses for EU and 3 <sup>rd</sup> country labs nization of PTs nical assistance to DG-SANCO & EFSA (concerning e.g. evaluation of analytical aspects erning revision of reasoned opinions on the re-evaluation of MRLs according to Art. 12
Scientific Publications	- Conti - Publi - Publi	ribution in books: 3 cations in journals: 40+ cations in EURL-website: 70+ er presentations: 120+ presentations: 150+ in all continents
Training Activities	the E WHO Domi	dition to the annual training and workshop events conducted within the framework of URL, conduction of numerous trainings organized by different organizations such as /IAEA, BTSF and UNDP in various countries, such as Albania, Argentina, Austria, Cyprus, nican Republic, Egypt, Germany, Greece, Hungary, India, Italy, Japan, Lebanon, Saudia, Singapore, Thailand
Major Scientific achievements	- QuOi - QuPF - Analy - Web- - Pesti - EURL	The Rhern Scheduler (CEN-Standard, used by 80+% of pesticide labs worldwide)  I method (CEN technical standard in process of becoming a CEN-Standard)  The method (in process of becoming CEN-Standard)  The Protectants Concept  Projects:  Cides-Online (www.pesticide-online.com),  Portal Website (eurl-pesticides.eu) and  Datapool (eurl-pesticides-datapool.eu)
Awards	08/1999	Bruno Rossmann Award for "Development a Fast Method for the Determination of Carbendazim, Benomyl und Thiophanate-Methyl as a Sum and 2,4-D in Fruits and Vegetables Involving Extraction with Supercritical CO <sub>2</sub> " by the German Chemical Society (GDCh) during the German Food Chemistry Congress in Hamburg.
	06/2002	<u>Poster-Award</u> at the 4 <sup>th</sup> European Pesticide Residue Workshop in Rome/Italy, title of the poster: "Reduction of Analyte Degradation and Peak Tailing During GC Injection by Addition of Protecting Agents" (shared)
	08/2009	ARS Outstanding Efforts in Technology Transfer Award by the USDA Agricultural Research Service (ARS) for developing the QuEChERS approach to monitor pesticides and other foods (shared)
	11/2009	<u>DIN-Preis Nutzen der Normung 2009 = 2009 DIN-Award for Utility of Standard</u> - For the implementation of the standard EN-15662 (QuEChERS-citrate buffered) (DIN= German Standardization Body)
	06/2012	<u>Poster-Award</u> at 9 <sup>th</sup> European Pesticide Residue Workshop in Vienna, title of the poster: "Analysis of Amitraz (sum) from QuEChERS Extracts – comparison of the method involving analysis of individual MRM-Amenable metabolites (DMF, DMPF and DMA) with a method involving cleavage to DMA" (shared)
	06/2014	<u>Poster-Award</u> at 10th European Pesticide Residue Workshop in Limassol, title of the poster: "Analysis of Fumigants in Cereals and Dry Fruit Applying GC-MS/MS" (shared)
	08/2014	<u>Poster-Award</u> at 13th IUPAC Congress, San Francisco 2014, title of the poster:" QuEChERS-LC-MS/MS and GCxGC-TOF adaptability for the analysis of beehive products seeking the development of agroecosystems sustainability monitor" (shared)
	07/2015	NACRW Excellence Award at 52 <sup>nd</sup> North American Chemical Residue Workshop, "for Sample Preparation relevant to Chemical Residue Analysis for the development, validation and implementation of the Quick, Easy, Cheap, Effective, Rugged and Safe (QuEChERS) as a sample preparation procedure for the analysis of pesticides and other chemical contaminants in food and agricultural matrices"