



**Physicians
Committee**
for Responsible Medicine



Abstract Sifter – Innovative PubMed search and retrieval for chemical information

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The views expressed in this presentation are those of the author and do not necessarily reflect the views or policies of the U.S. EPA

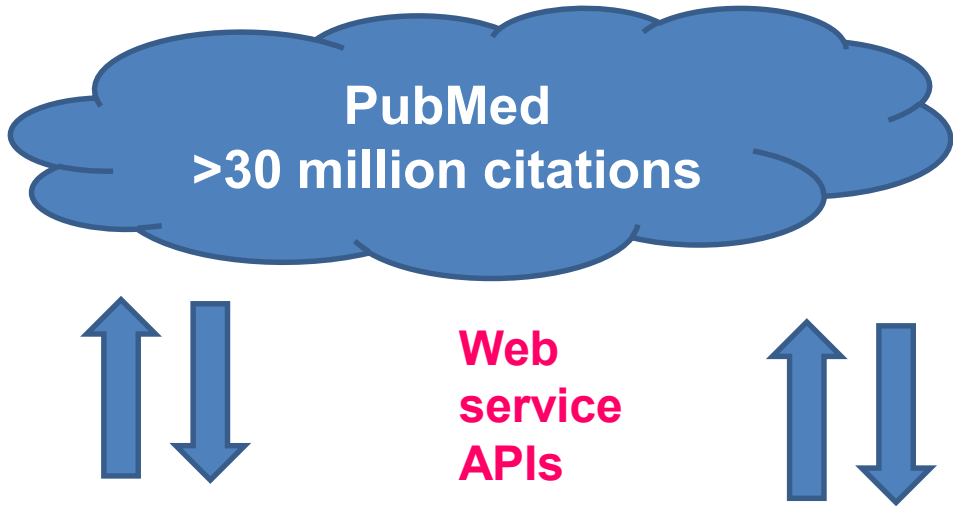
*Practical Applications of New Approach Methodologies (NAM) in Chemical Safety Assessment:
Applying US EPA Tools/Approaches in Practice
10/23/2020*

- Literature informatics
 - Make literature tasks easier and more effective
 - Important because of vast chemical literature
- Today's topic – Abstract Sifter
- Two implementations
 - EPA Chemicals Dashboard
 - Microsoft Excel
- Both – freely available

Motivation: PubMed – great resource, but ...

- PubMed has limitations and frustrations
- Abstract Sifter original design aim: Find what you want quickly without frustration
- Much more functionality added

Concept



Dashboard version

[illegible]

Excel version

Abstract Solver Query PubMed Published query from: clean pollution effects

v5.5 Your other terms and frequency counts

Figure1 skin mite Score Yr Title

PM10

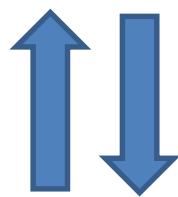
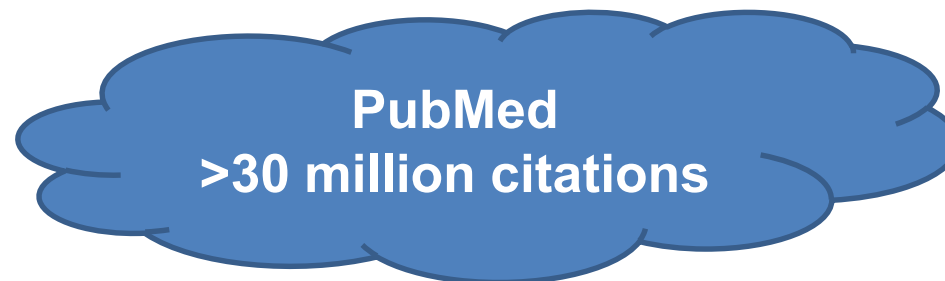
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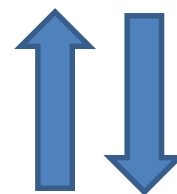
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2020 Contamination of stream fish by plastic waste in the Brazilian Amazon.
2020 Heavy metal bioaccumulation, oxidative stress and genotoxicity in African catfish, *Clarias gariepinus* from Omotere river.
2020 High prediction of native sea lamprey during spawning migration.
2020 The Plastic Risk - First Evidence of Microplastic Contamination in Fish from the Nile River (Cairo, Egypt).

Which version to use?



Web
service
APIs



Dashboard version

CompTox Chemicals Dashboard

882 Fipronil 120068-37-3 | DTXSID4034609

Chemicals Product/Use Categories Assay/Gene

Search for chemical by systematic name, synonym, CAS number, DTXSID, or identifier substring search

See what people Cite the

Abstract Sifter

47 of 47 articles listed

PMID	Year	Title	Author	Journal
27151795	2025	Use of a novel liquid chromatography-mass spectrometry method for the detection of fipronil in honey bees.	Wang, L., et al.	Journal of Chromatography B
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- Quick lookup
- Connected to chemical

Excel version

Abstract Sifter

Query PubMed

PubMed query was: fipronil

Take Group Notes More things

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- Complex project
- Want to tag and note
- Literature reviews
- More than one chemical

Demonstration

<https://comptox.epa.gov/dashboard>

<https://comptox.epa.gov/dashboard/downloads>

ftp://newftp.epa.gov/COMPTOX/Sustainable_Chemistry_Data/Chemistry_Dashboard/Abstract_Sifter/AbstractSifter.zip