

## 1. Getting the Dataset

- Identify the Topic
- Define the Keywords
- Design the Search Query
- Evaluate the Search Results
- Set the Inclusion & Exclusion Criteria
- Download the Initial Dataset
- Screen & Clean the Dataset
- Download the Dataset After Screening

## 2. Preliminary Analysis

- Copy Scopus Export Refine.csv to biblioMagika®
- Copy scopus.csv to biblioMagika®
- Refresh
- Run Basic info. Analysis
- Conduct Analysis on Publication by Year
- Conduct Analysis on Publication by Sources
- Conduct Analysis on Highly Cited Documents
- Conduct Analysis on Authorship Analysis

## 3. Clean Author and Index Keywords

- Upload the Scopus.csv file to OpenRefine
- Run Text Facet on Author Keywords
- Split the Author Keywords Columns using the Separator “;”
- Change to Lowercase
- Clean the Keywords using ALL Clustering Techniques
- Clean the Keywords using the Manual Editing Technique
- Join Author Keywords Columns using Separator “;”
- Do the same for Index Keywords
- Export as Comma-Separated Value
- You should NOW have the Scopus.csv file with CLEANED Authors’ and Indexed Keywords.

## 4. Splitting & Identify Missing Data

- Copy Data from biblioMagika® to biblioMagika@Split
- Split the Data
- Copy Split Data to Cleaning WorkSPACE
- Copy Formula
- Assign Numbering
- Identify Missing Data Cells
- Hide Unused Columns
- Sort Authors Full Name Column by Color & Resolve Yellow & Pink Cells
- Sort Authors with Affiliation Column by Color & Value and Resolve Red, Green and Purple Cells
- Resolve Author’s Names & Affiliations Issues
- Copy Column Q&R (Affiliation & Country)
- Paste as Value in the same Column - to remove formula

## 5. Harmonizing Author’s Names & Institutions

- Manually Harmonise the Author’s Affiliations
- Save Cleaning WorkSPACE data in Other Excel File
- Harmonize Author’s Names and Affiliations using OpenRefine
- Upload the file to Open Refine
- Run Text Facet on Author Full Names Column
- Clean Author Full Names using ALL Clustering Techniques
- Clean Author Full Names using Manual Editing
- Run Text Facet on Affiliations Column
- Clean Affiliation using ALL Clustering Techniques
- Clean Affiliation using Manual Editing Technique
- Export as Excel 2007+(.xlsx) file
- Copy Author Full Names column to biblioMagika@Split
- Copy Affiliation column to biblioMagika@Split
- Continue Manually Harmonise the Author’s Affiliations
- Harmonise Author’s IDs and Names
- Harmonise Author’s Names and IDs
- Your Cleaning WorkSPACE data in now Completely CLEANED

## 6. Further Analysis

- Copy Authors (NEW) from biblioMagika@Split to biblioMagika
- Copy Affiliation from biblioMagika@Split to biblioMagika
- Copy Countries from biblioMagika@Split to biblioMagika
- Refresh
- Conduct Analysis on Publication by Author
- Refresh Publication by Institutions
- Copy NCA Data to Designated Cell
- Remove Duplicates
- Refresh Publication by Country
- Copy NCA Data to Designated Cell
- Remove Duplicates
- Refresh
- Conduct Analysis on Publication by Institution
- Conduct Analysis on Publication by Country

## 7. Joining Split Data

- SORT the Cleaning WorkSPACE Worksheet by NO.
- COPY data from the Cleaned Authors worksheet
- Paste it to the Join\_NEW worksheet and Join Data
- COPY data from Authors (OLD) worksheet
- Paste it to the Join\_OLD worksheet and Join Data
- Sort Data in scopus.csv, Join\_NEW and Join\_Old by EID
- Copy Columns Author full names and Authors with affiliations from Join\_NEW
- Paste it to scopus.csv
- Copy Columns Authors and Affiliations from Join\_Old
- Paste it to scopus.csv
- You should have scopus.csv file with CLEANED authors’ names and affiliations.

