Introduction to Research
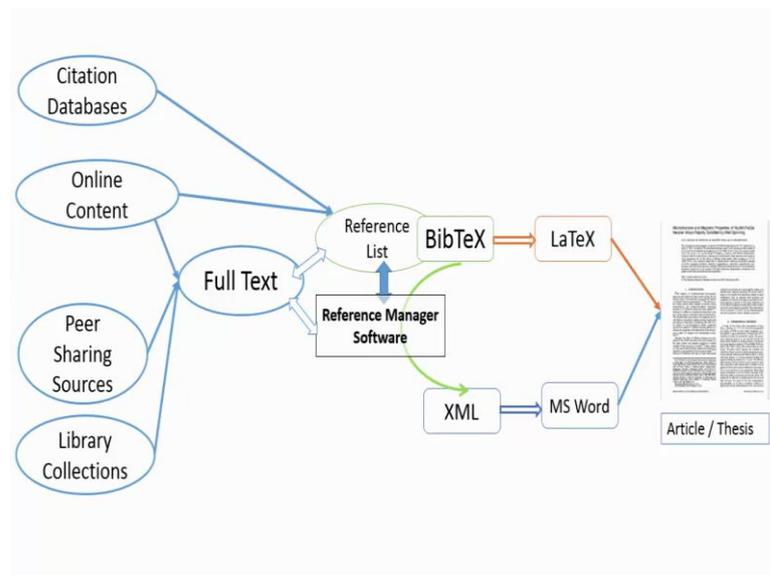**Department of Metallurgical and Materials Engineering**
Indian Institute of Technology, Madras

Lecture – 09
Literature Survey: Wrapping up

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So this is the outline of how we went about this module. We have looked at Citation Databases such as Web of Science and Scopus from where we will be getting the list of references. We also have seen several links, where we can find the full text online such as Science Direct and Springer link. We also have given links where peer sharing of journal articles is available such as in Research Gate and academia.edu; and most of the universities also have libraries where hard copy collections are available for full text of articles. So we will be collecting full texts relevant to our research area - both online and hard copy, and we will also be collecting list of references. It's very important to link these two, so that we know which articles we need for our research area.

The reference management software is very useful in getting this done. JabRef is a very useful reference manager software. The native format for JabRef is BibTeX. And if you have your data on the list of references in BibTeX format, then you can use them directly in LaTeX, so that you can add citations to the article or the thesis that you are writing.

And if you prefer to use Microsoft Word to write your article or thesis, then you can use JabRef to convert the literature data from BibTeX to XML, and then use XML format to provide the bibliographic list of references as a bibliographic source in Microsoft Office.

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Importance of References

- Typographical errors due to manual entries to be avoided
- All publications cited in the document are to be listed at the end of the document
- Style of referencing to be customized as per the standard format of University / Journal
- Sequencing to be taken care of automatically while editing the document

LaTeX and Microsoft Word can take care of these

|	Article	Thesis
Chapters	X	√
(Sub)Sections	√	√
Referring Figures	√	√
List of Figures	X	√
Referring Tables	√	√
List of Tables	X	√
Cited Reference List	√	√
Size of Document	2 – 20 pages	50 – 200 pages
No. of References	10-30	100-300

Adding captions to Figures and Tables and using them to cross-refer

The reason why reference management is very important is evident from this summary. We can see that a journal article that you are going to write or the thesis that you will have to write at the end of your research degree is going to contain large number of sections which will be falling in figures, tables, references, etcetera. And the size of references is going to vary by the size of the document you are going to write. So, from 10 to 30 references may be made in an article, while about 100 or more references will be made in a thesis. So it's very important that when we write these references we do not make any typographical errors due to manual entry. And it's also important to see that every publication that is cited in the document is also listed at the end of the document.

The style of referencing will be customized as per the standard format recommended by the university or the journal where you are going to submit your article. The sequencing of these references is also very important, so that it can be taken care automatically by the software that you are using to write your article. In this sense, LaTeX and Microsoft Word can take care of these aspects very well. The way we manage references can also

be applicable to both figures and tables. However, we will not be looking at them here.

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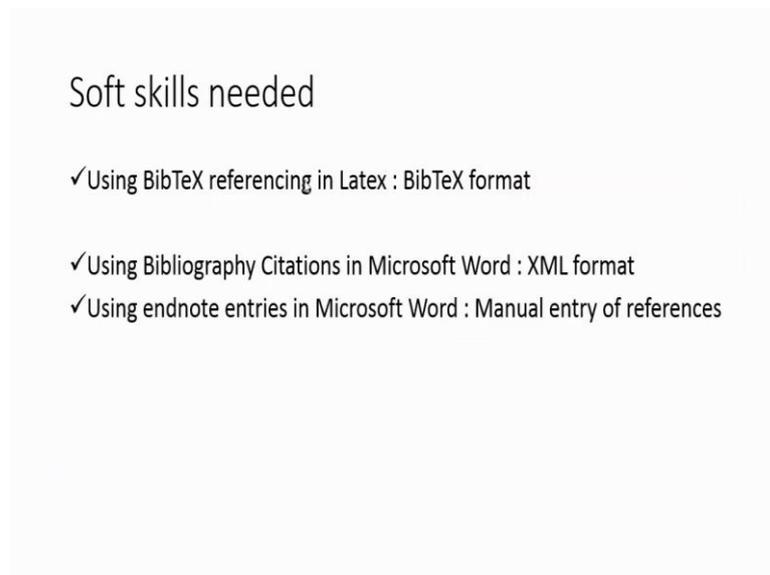
So you will need to learn couple of soft skills so that you can proceed to write up your document very neatly using the referencing automatically. If you are going to use LaTeX, then you should know about BibTeX, and if you are going to use MS Word then you should know how to use bibliography citations or how to make endnote entries.

Bibliographic citations using LaTeX is quite straight forward. A summary is given here: you have to keep the bib file containing your reference data in the same folder as your tex file and ensure that the bib file contains the BibTeX field unique for every entry. You can use the command bibliography to point the file name containing the bibliographic references. And you can use the command bibliography style to choose a style of referencing - alpha numeric, number wise or name plus year etcetera. And you can cite a given reference using the command cite, and you can place it at any point in your document; you may have to compile multiple times so that the references are available while compiling. So you will start off by compiling with LaTeX, and then BibTeX, and then again LaTeX couple of times, so that the bibliographic references are all set in the sequence that you have given.

And here, we see a brief demonstration of how to do it in BibTeX plus LaTeX.

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Referencing using Bibliographic Sources in Microsoft Word

- Convert your "*.bib" file to "*.xml" file using JabRef
- Using the menu "References → Manage Sources", open the Source Manager Dialogue. Use the "Browse..." button to select the "*.xml" file you just created.
- Select and copy all the references from left side to the current list by clicking "Copy →" button. Close the dialogue.
- You can now cite a reference at any location in your article by clicking "References → Insert Citation" and choosing the reference.
- At the bottom of the text, use "References → Bibliography → References" to insert a list of cited references.
- Once you are done writing the article, do not forget to open the Source Manage Dialogue again and remove the unused reference from the current list by deleting them.
- Update the Reference List and you are done.

Referencing using bibliographic sources in Word is also quite straight forward. However, it requires that your bibliographic data is available in an XML format. You can use JabRef to convert the data from bib format to XML format. Using the menu on Microsoft Word, References and Manage Sources you can open the Source Manager dialogue and use the Browse button to select the XML file. Select and copy all the references from the left-hand side pane to the right-hand side in the current list by clicking the Copy button, and then, you can close the dialogue. You can now cite a reference at any location in your article by clicking References, Insert Citation, and then, choosing the reference that you want to cite. At the bottom of the text use References, Bibliography, References to insert a list of cited references. Once you are done writing an article do not forget to open the Source Manage dialogue again and remove the unused references from the current list by deleting them. Update the references list and then you are done.

We will see a brief demo of Microsoft Word using bibliographic sources now.

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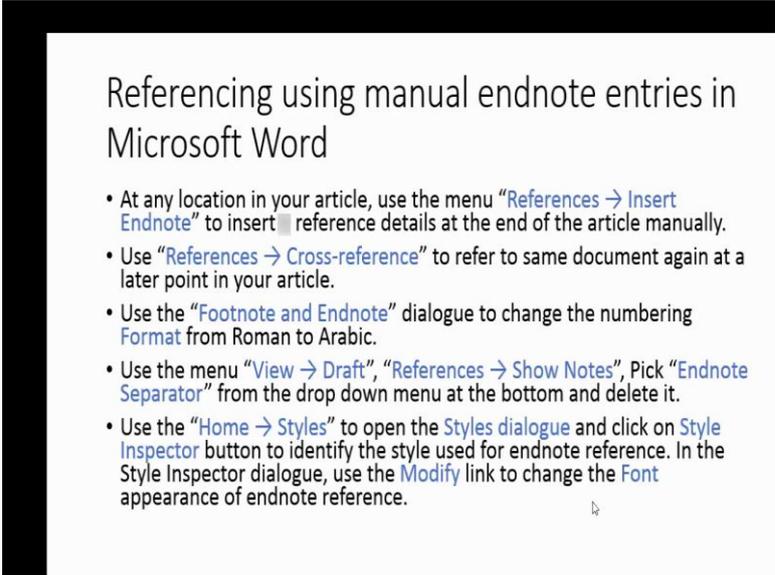
Referencing using manual endnote entries in Microsoft Word is quite straight forward. At any location in your article use the menu item References, Insert Endnote to insert a reference detail at the end of the article manually. You have to copy paste the reference detail from some other source, you can do it from JabRef also. Use References, Cross reference to refer to the same document again at a later point in your article. Use a Footnote and Endnote dialogue to change the numbering format from Roman to Arabic. Use a menu View Draft, References, Show Notes; pick Endnote Separator from the drop-down menu at the bottom and delete it, if you do not want to see that line separating your document and the list of references. Use Home, Styles to open the Styles dialogue; click on the Style Inspector button and identify the style used for the endnote reference, and then, in the same dialogue you can use the Modify Link to change the font appearance of the Endnote Reference.

And this is all that is required to list the endnotes at that end of your document in the sequence that you are going to use in your document.